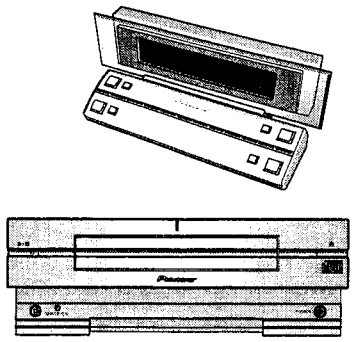
Service Manual

Pioneer



ORDER NO.
RRV2187

STEREO CD RECEIVER

XC-L77

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
	XC-L77		
MYXK	○	AC220-230V	
NVXK	○	AC230V	

- **This product is a system(s) component.**
  Be sure to connect it to the prescribed system component(s), otherwise damage may result.

Component	Model			Service manual	Remarks
STEREO CD RECEIVER	XC-L77			RRV2187	This manual.
SPEAKER SYSTEM	S-L9-LRW	–	–	RRV2176	
	–	S-L9-A-LRW	–	RRV2176	
	–	–	S-L8-LRW	RRV2178	
STEREO CASSETTE DECK	CT-L77			RRV2199	
MINIDISC RECORDER	MJ-L77			RRV2201	

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PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER ELECTRONIC (EUROPE) N.V. Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

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T – ZZK AUG. 1999

1. SAFETY INFORMATION

LITHIUM BATTERY NOTICE

WARNING!
Lithium batteries. Danger of explosion. Replacement must be done by qualified personnel and only by following the instructions given in the service manual.

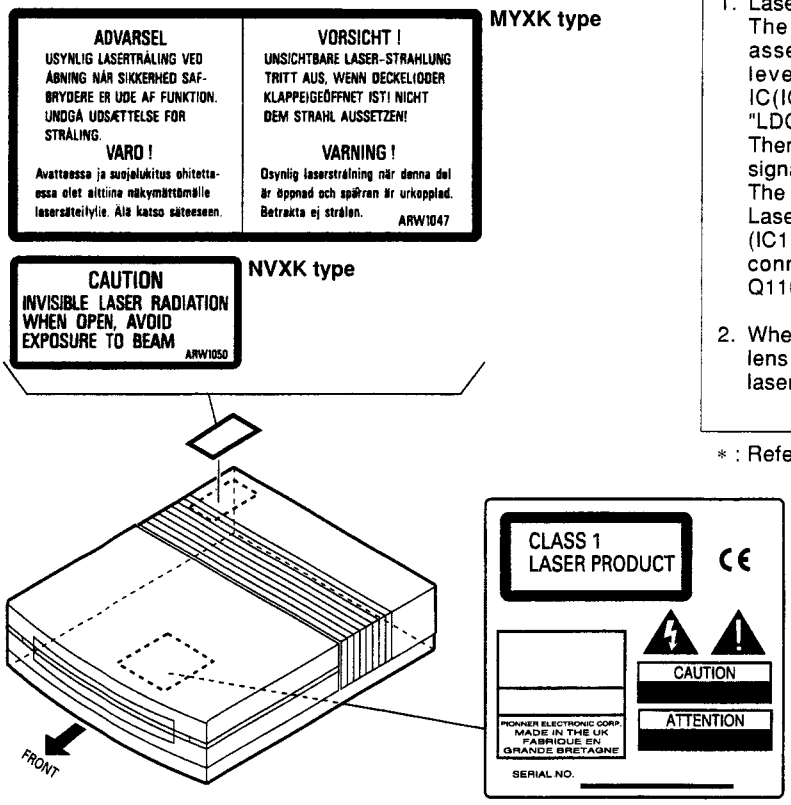
This warning is stated on the product or in the operating instructions. When replacing the lithium batteries, follow the note below.
Dispose of the used battery promptly. Keep away from children. Do not disassemble and do not dispose of in fire.
The battery used in this device may present a fire or chemical hazard if mistreated. Do not recharge, disassemble, heat above 100°C or incinerate. Replace only with the same Part Number. Use of another battery may present a risk of fire or explosion.

Note: The lithium battery installation position is shown in the exploded views.

ADVARSEL!
Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

Denne advarsel or angivet på produktet eller i brugsvejledningen. Ved udskiftning af lithium batterierne følges nedenstående anveisning.
Batterierne må kun udskiftes med batterier af samme type og mærke.

LABEL CHECK


ADVARSEL
USYNLIG LASERTRÅLING VED ÅBNING NÅR SIKKERHED SAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARO!
Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.
VORSICHT!
UNSICHTBARE LASER-STRAHLUNG TRITT AUS, WENN DECKELTÜDER KLAPPEIGEÖFFNET IST! NICHT DEM STRAHL AUSSETZEN!
VARNING!
Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.
ARW1047
MYXK type
CAUTION
INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO BEAM
ARW1050
NVXK type
FRONT
CLASS 1
LASER PRODUCT
CE
CAUTION
ATTENTION
PIONNER ELECTRONIC CORP. MADE IN THE UK FABRIQUE EN GRANDE BRETAGNE
SERIAL NO.

Additional Laser Caution

1. Laser Interlock Mechanism
   The loading position detect switch (in CD mechanism assembly) is set to "CLMP ON(CD CLOSE)" (ON:low level,OFF:high level) position, the system control IC(IC5501) get the "CLMP" signal, and hand the laser "LDON" signal to IC1101.
   Then a laser diode can be lighted except when the level of signal CLMP is low.
   The interlock also does not function in the test mode*.
   Laser diode oscillation will continue, if pin 1 of CXA1821M (IC1101) on the RF UNIT is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q1101 are shorted to each other (fault condition).

2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

* : Refer to page 42.

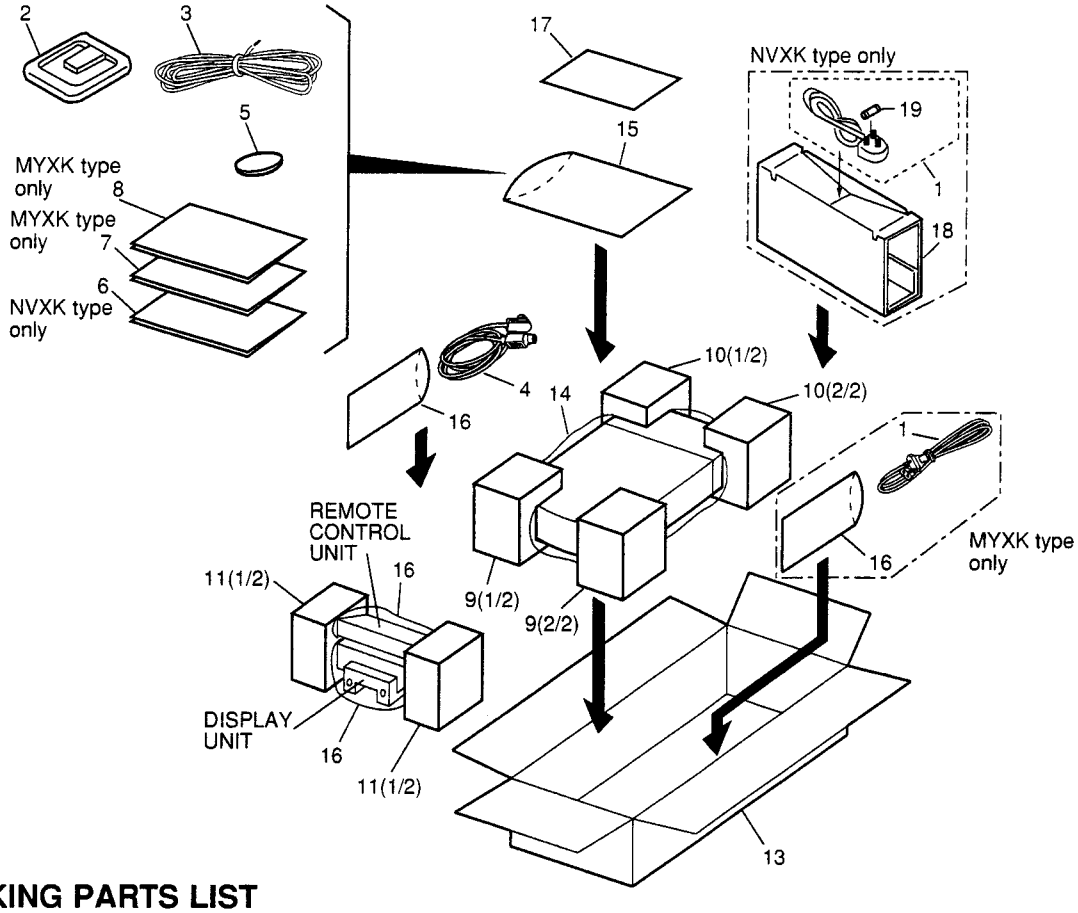
IMPORTANT
THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

LASER DIODE CHARACTERISTICS
MAXIMUM OUTPUT POWER: 5 mW
WAVELENGTH: 780 – 785 nm

2. EXPLODED VIEWS AND PARTS LIST

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
● *Screws adjacent to ▼ mark on the product are used for disassembly.*

2.1 PACKING



(1) PACKING PARTS LIST

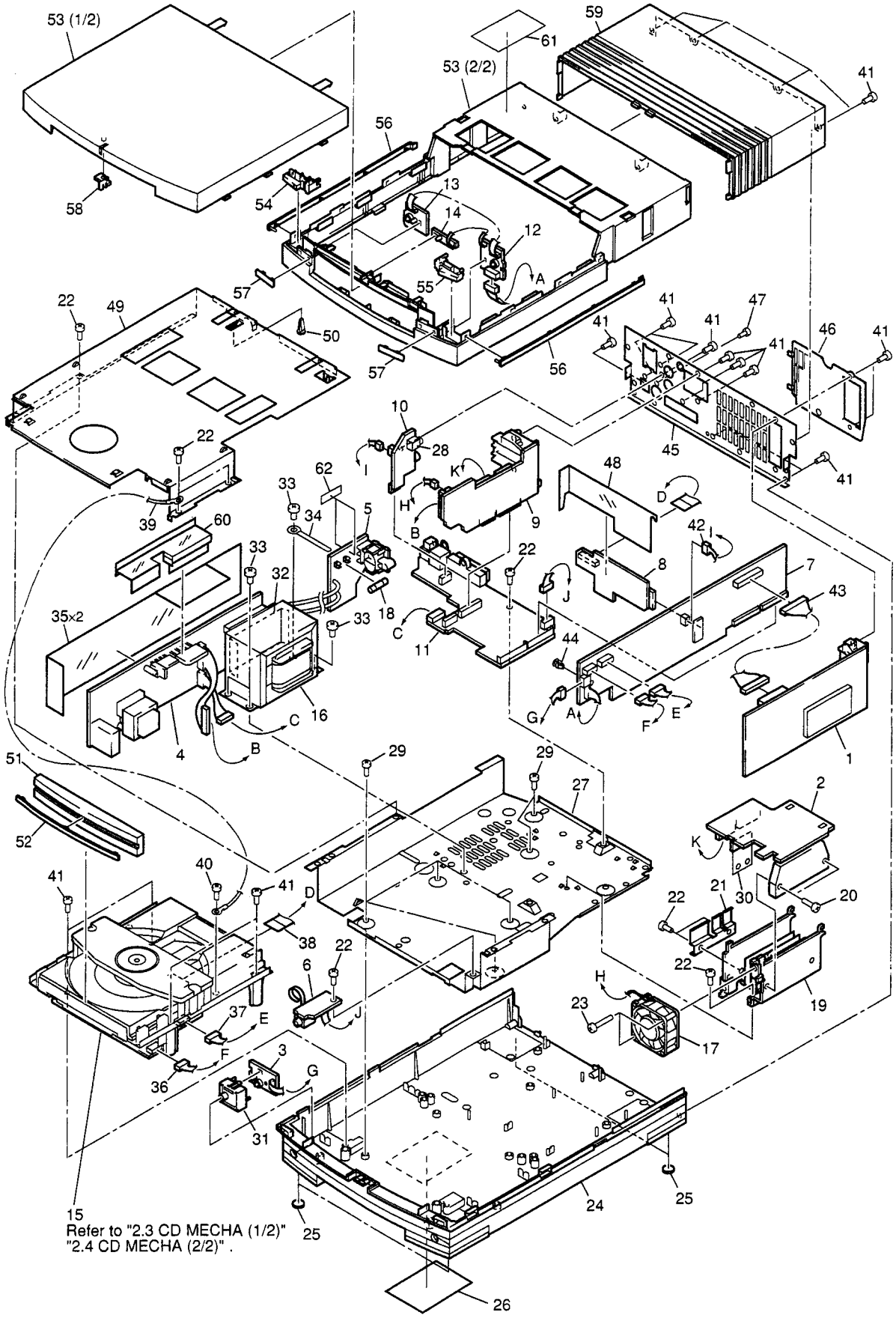
Mark	No.	Description	Part No.
⚠	1	AC Power Cord	See Contrast table (2)
	2	AM Loop Antenna	ATB7007
	3	FM Wire Antenna	ADH7005
	4	Display unit connecting cord	ADE7014
NSP⚠	5	Lithium Battery(CR2025)	VEM1009
	6	Operating Instructions	See Contrast table (2)
	7	Operating Instructions	See Contrast table (2)
	8	Operating Instructions	See Contrast table (2)
	9	Pad Front	AHA7260
	10	Pad Rear	AHA7261
	11	Pad Display	AHA7262
	12	•••••	
	13	Packing Case	See Contrast table (2)
	14	Packing Sheet	Z23-007
	15	Polyethylene Bag	Z21-038
NSP	16	Polyethylene Bag	CEG1116
NSP	17	Warranty Card	ARY7022
	18	Sub Packing	See Contrast table (2)
⚠	19	Fuse (T5A)	See Contrast table (2)

(2) CONTRAST TABLE

XC-L77/MYXK and NVXK are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.		Remarks
			MYXK Type	NVXK Type	
⚠	1	AC Power Cord	ADG7010	ADG7009	
	6	Operating Instructions (English)	Not used	ARB7195	
	7	Operating Instructions (Dutch/Swedish/Spanish/Portuguese)	ARC7250	Not used	
	8	Operating Instructions (English/French/German/Italian)	ARE7221	Not used	
	13	Packing Case	AHD7766	AHD7768	
	18	Sub packing	Not used	AHD7770	
⚠	19	Fuse (T5A)	Not used	AEK7001	

2.2 EXTERIOR


53 (1/2)
59
61
53 (2/2)
41
56
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A
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50
57
56
41
47
46
10
28
I
K
H
9
48
D
62
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34
5
B
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42
8
7
43
J
35×2
18
C
11
44
G
A
F
E
1
60
39
32
16
4
B
51
52
29
29
27
2
K
40
41
41
D
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J
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E
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G
31
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H
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Refer to "2.3 CD MECHA (1/2)"
"2.4 CD MECHA (2/2)" .
25
24
25
26

(1) EXTERIOR PARTS LIST

Mark	No.	Description	Part No.
	1	FM/AM TUNER UNIT	AXQ7226
	2	AMP UNIT	AWU7376
	3	STBY SW UNIT	AWU7386
	4	SECONDARY UNIT	AWU7378
	5	PRIMARY UNIT	AWU7379
	6	HP UNIT	AWU7382
	7	MAIN UNIT	AWU7374
	8	RF UNIT	AWU7380
	9	SPEAKER UNIT	AWU7377
	10	AUX UNIT	AWU7381
	11	CONNECTOR UNIT	AWU7375
	12	KEYR UNIT	AWU7383
	13	KEYL UNIT	AWU7384
	14	BLUE IND. UNIT	AWU7385
	15	CD MECHA	KSL-2130CCM
⚠	16	Power transformer (T1)	ATS7256
	17	DC Fan Motor	AXM7014
⚠	18	Fuse (FU1 : T1A)	AEK1054
NSP	19	Heat Sink	ANH7108
	20	Screw	BBZ30P140FMC
	21	Heat Plate	ANG7250
	22	Screw	BBZ30P060FMC
	23	Screw	BBZ30P300FMC
	24	Bottom Base	AMA7013
	25	Leg	AEB7090
	26	Name Label	See Contrast table (2)
NSP	27	Bottom Plate	ANF7016
	28	Jack (JA5551)	RKN1026
	29	Screw	BBT30P060FZK
	30	Sheet	AEE7034

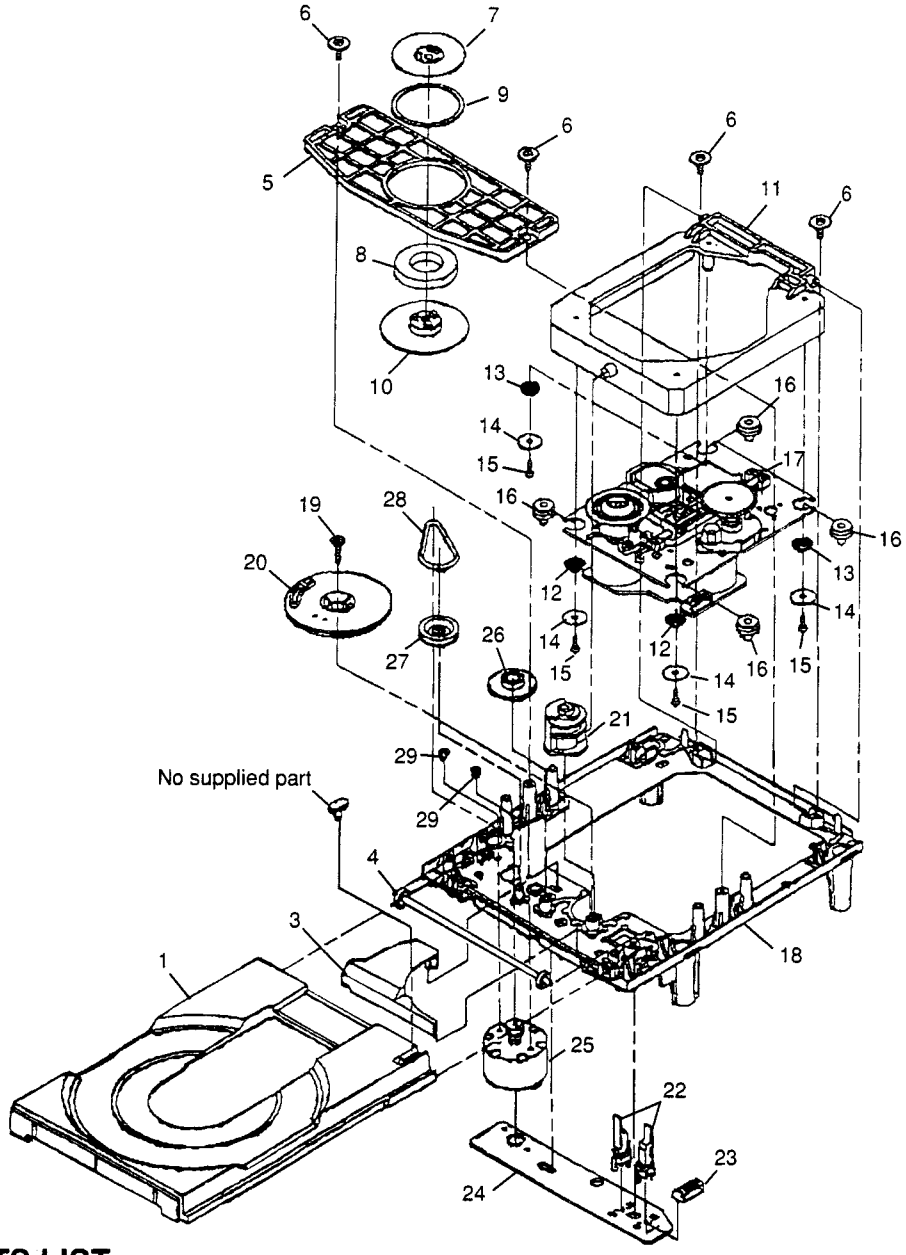
Mark	No.	Description	Part No.
	31	Power Button Assy	AWL7049
	32	TR Barrier	AEC7213
	33	Screw	BBZ40P060FMC
NSP	34	Binder	ZCB-4772B
	35	Power Barrier	AEC7196
	36	Connector Assy	PG05KK-E20
	37	Connector Assy	PG06KK-E20
	38	16P Flat Flexible Cable/30V	ADD7185
NSP	39	Cord with Plug	DE010VF0
	40	Screw	PDZ30P060FMC
	41	Screw	VPZ30P080FZK
	42	Connector Assy	PF03PP-Q20
	43	Connector assy (J5101)	PG14KK-E07
	44	Card Spacer	AEC7214
	45	Rear Panel	ANC7826
	46	Rear Cover	AAX7705
	47	Screw	PCZ30P080FZK
	48	Center Barrier	AEC7198
NSP	49	Top Plate	ANF7017
	50	Push Rivet	AEC7221
	51	Tray Panel	AAN7194
	52	Tray Line	AAP7059
	53	Top Panel Assy	AWL7050
	54	Button Assy A (▶/II)	AWL7044
	55	Button Assy B (⏏)	AWL7045
	56	Main Line	AAP7058
	57	Front Line	AAP7066
	58	CL Lens	AAX7704
	59	Bonnet	AMA7015
	60	Sub Barrier	AEC7197
NSP	61	Caution Label	See Contrast table (2)
NSP	62	Fuse Card	AXX7033

(2) CONTRAST TABLE

XC-L77/MYXK and NVXK are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.		Remarks
			MYXK Type	NVXK Type	
	26	Name Label	ARW7066	ARW7067	
NSP	61	Caution Label	ARW1047	ARW1050	

2.3 CD MECHA (1/2)

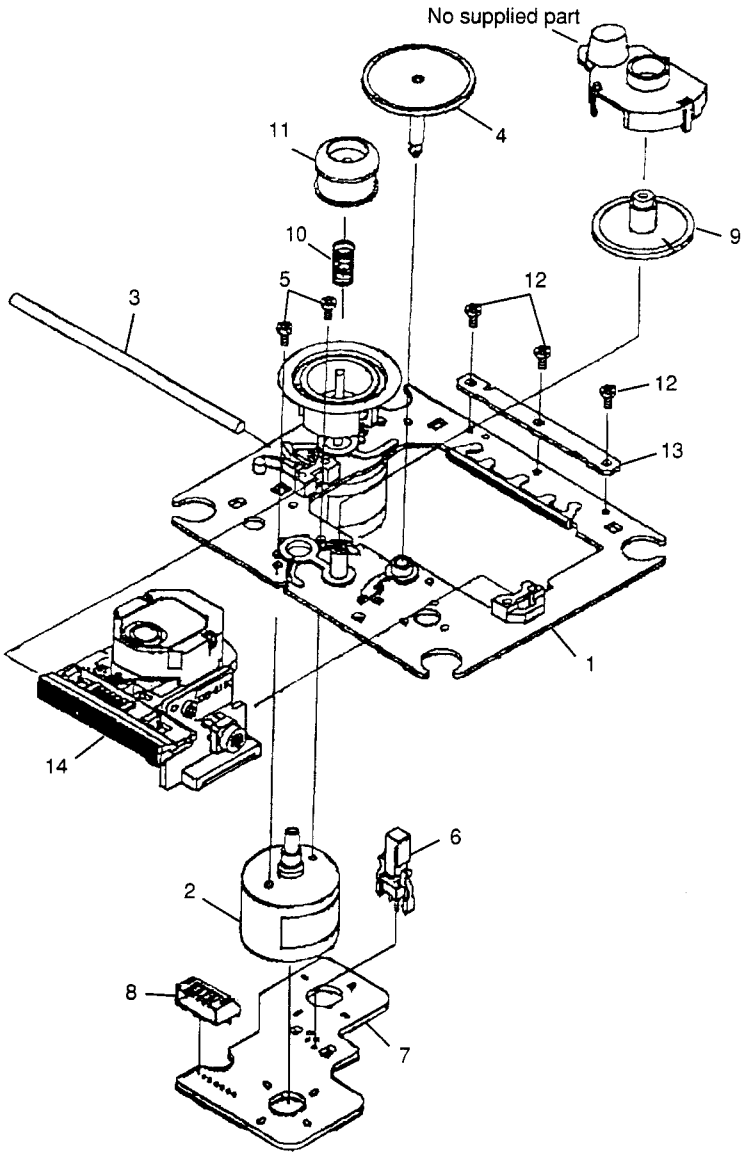


• CD MECHA (1/2) PARTS LIST

Mark	No.	Description	Part No.
	1	Tray(C)	2-646-290-01
	2	•••••	
	3	Cover(S),Gear	2-625-544-(01)
	4	Gear(S),Tray	2-625-535-(01)
	5	Plate(S),Chucking	2-625-546-(01)
NSP	6	Screw +PTPWH2.6*7	•••••
	7	Chucking Yoke(S)	2-625-537-(01)
	8	Magnet	1-452-493-(21)
	9	Damper(S)	2-625-541-(02)
	10	Chucking Pully	2-646-291-(01)
	11	Sub Chassis 2130	2-646-288-(01)
	12	Coil Spring (Front)	2-627-236-(01)
	13	Coil Spring (Back)	2-627-235-(01)
	14	Washer 2130	2-646-289-(01)
NSP	15	Screw+P2.6*10 NOSLIT	•••••

Mark	No.	Description	Part No.
	16	Insulator	2-627-234-(01)
NSP	17	MD Assy	•••••
	18	Outsert Main Chassis	2-625-552-(06)
	19	Screw +PTPWH2.6*16	3-319-501-(51)
	20	Drive Gear (S)	2-625-547-(01)
	21	Control Cam(S)	2-625-545-(04)
	22	Leaf Switch	1-692-667-(11)
	23	Connector Pin 5p	1-564-721-(11)
	24	Loading PC Board	1-640-523-(11)
	25	Loading Motor Assy	X-2625-117-(1)
	26	Midway Gear (S)	2-625-534-(02)
	27	Loading Pulley (S)	2-625-536-(02)
	28	LM Berut	3-653-387-(00)
NSP	29	Screw +B2.6*2.5	•••••

2.4 CD MECHA (2/2)

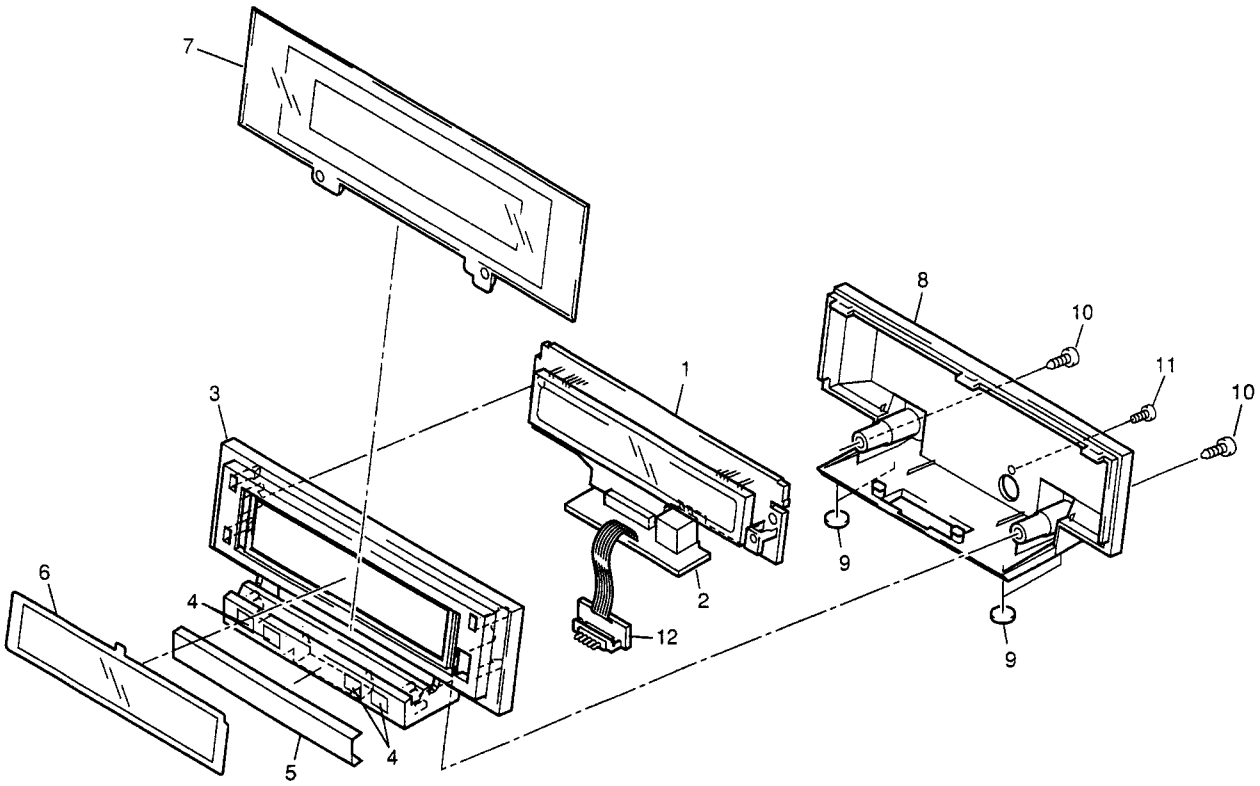


• CD MECHA (2/2) PARTS LIST

Mark	No.	Description	Part No.
	1	Motor Chassis Assy	X-2625-984-(1)
	2	Motor Gear Assy	X-2625-769-(1)
	3	Sled Shaft	2-626-908-(01)
	4	Gear (A)(S)	2-625-188-(02)
NSP	5	Screw +P2*3	•••••
	6	Leaf Switch	1-572-085-(11)
	7	Motor(6p)(S)PCB	1-639-678-(12)
	8	Connector Pin 6p	1-564-722-(11)
	9	Gear(B)(RP)	2-627-003-(01)
	10	Spring(S)Compression	2-625-191-(01)

Mark	No.	Description	Part No.
	11	Ring(LO)(S),Center	2-625-477-(01)
	12	Screw2*5,Tapping(S)	2-641-386-(01)
	13	Reinforcement(S)	2-625-625-(01)
	14	KSS-213C(Pick-up)	8-848-483-(05)

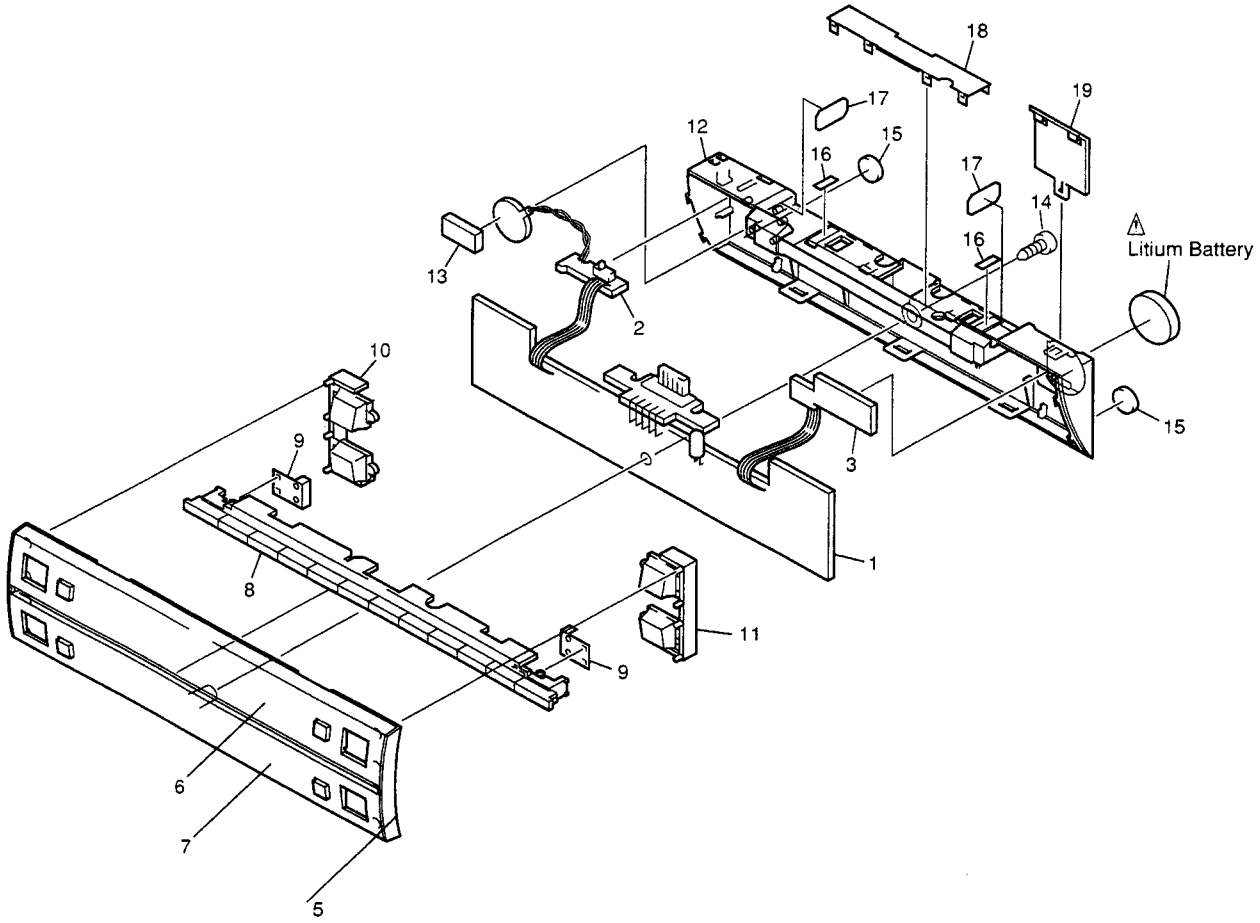
2.5 DISPLAY UNIT



• DISPLAY UNIT PARTS LIST

Mark	No.	Description	Part No.
	1	FL UNIT	AWU7387
NSP	2	FLSUB UNIT	AWU7388
	3	Display Panel	AMB7630
NSP	4	Magnet	PMF1010
	5	Display Plate	AAH7056
	6	FL Filter	AEC7195
	7	Window	AAK7668
	8	Display Cover	AMC7033
	9	Leg	AEB7090
	10	Screw	VPZ30P080FZK
	11	Screw	PCZ30P080FZK
	12	DETACH UNIT	AWU7389

2.6 REMOTE CONTROL UNIT

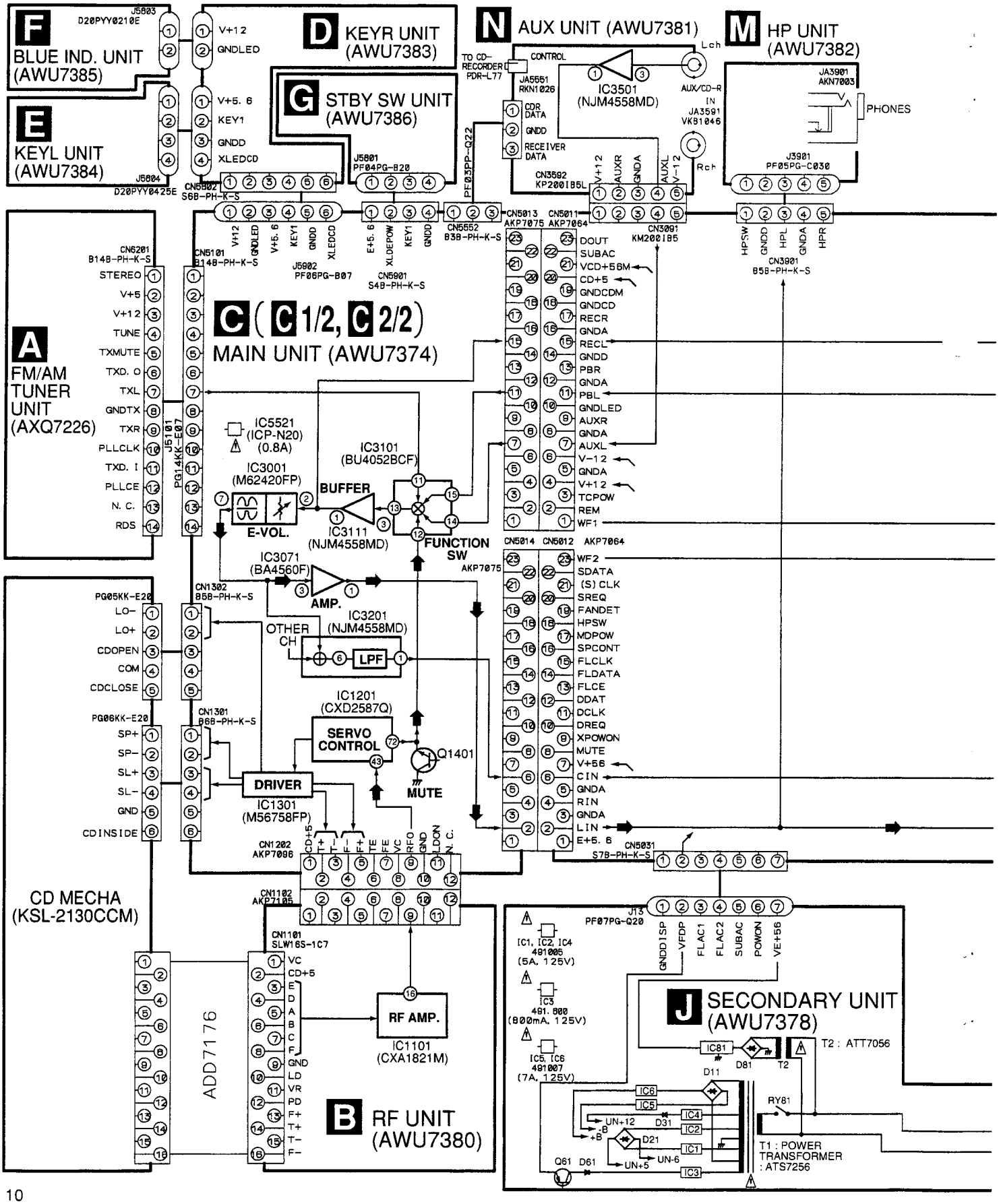


• REMOTE CONTROL UNIT PARTS LIST

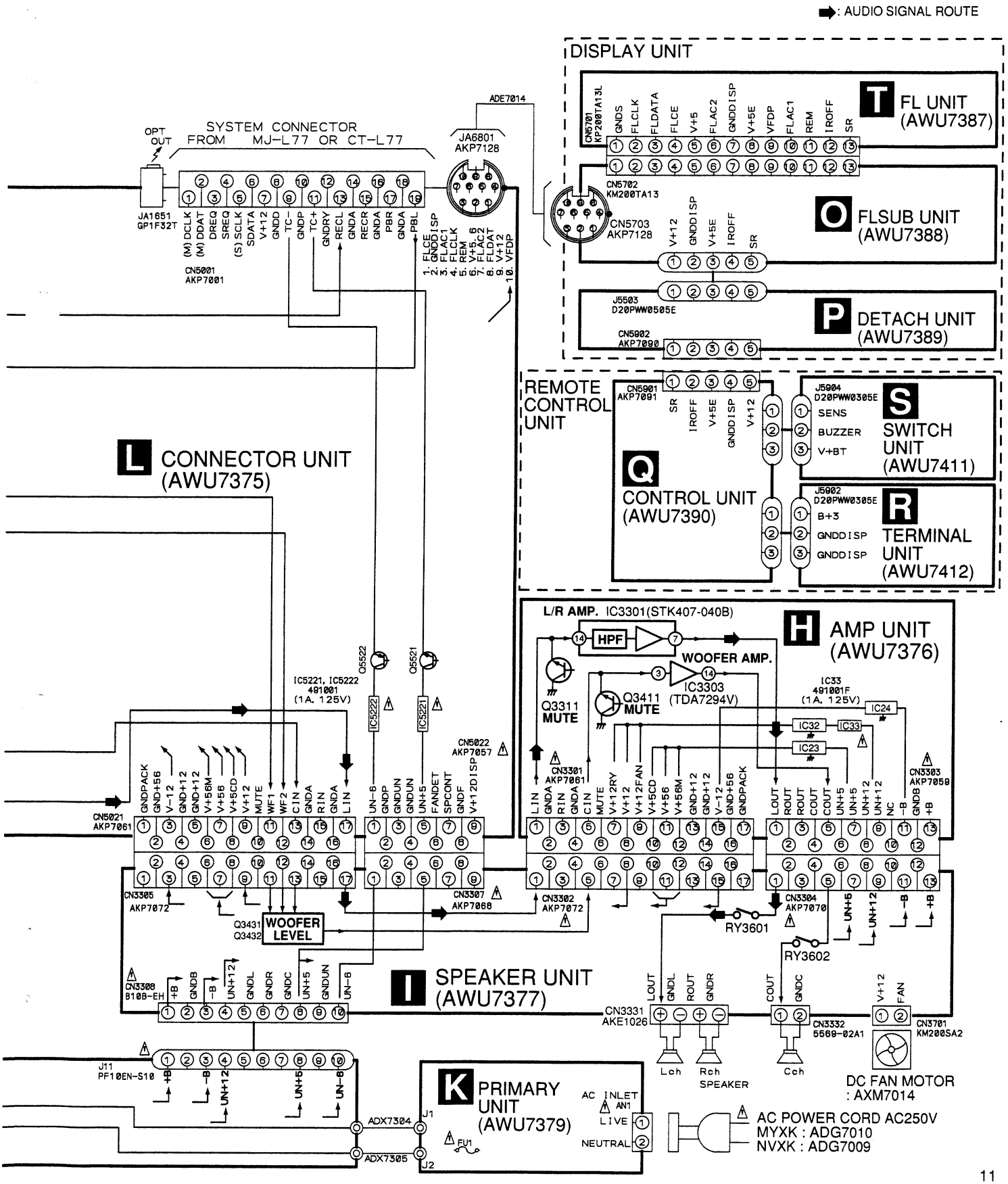
Mark	No.	Description	Part No.
	1	CONTROL UNIT	AWU7390
	2	SWITCH UNIT	AWU7411
	3	TERMINAL UNIT	AWU7412
	4	•••••	
	5	Control Panel	AMB7631
	6	Control Plate 1	AAH7051
	7	Control Plate 2	AAH7052
	8	Control Button	AAD7530
	9	Light Barrier	AEC7201
	10	VOL. Button (MENU, ⏻)	AAD7540
	11	VOL. Button (/\ , \/)	AAD7542
	12	Control Cover	AMC7034
	13	Spacer	AEB7163
	14	Screw	VPZ30P080FZK
	15	Leg	AEB7090
	16	Rear Sheet 1	AED7037
	17	Rear Sheet 2	AED7032
	18	Magnet Plate	ANG7255
	19	Battery Cover	AMC7035

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

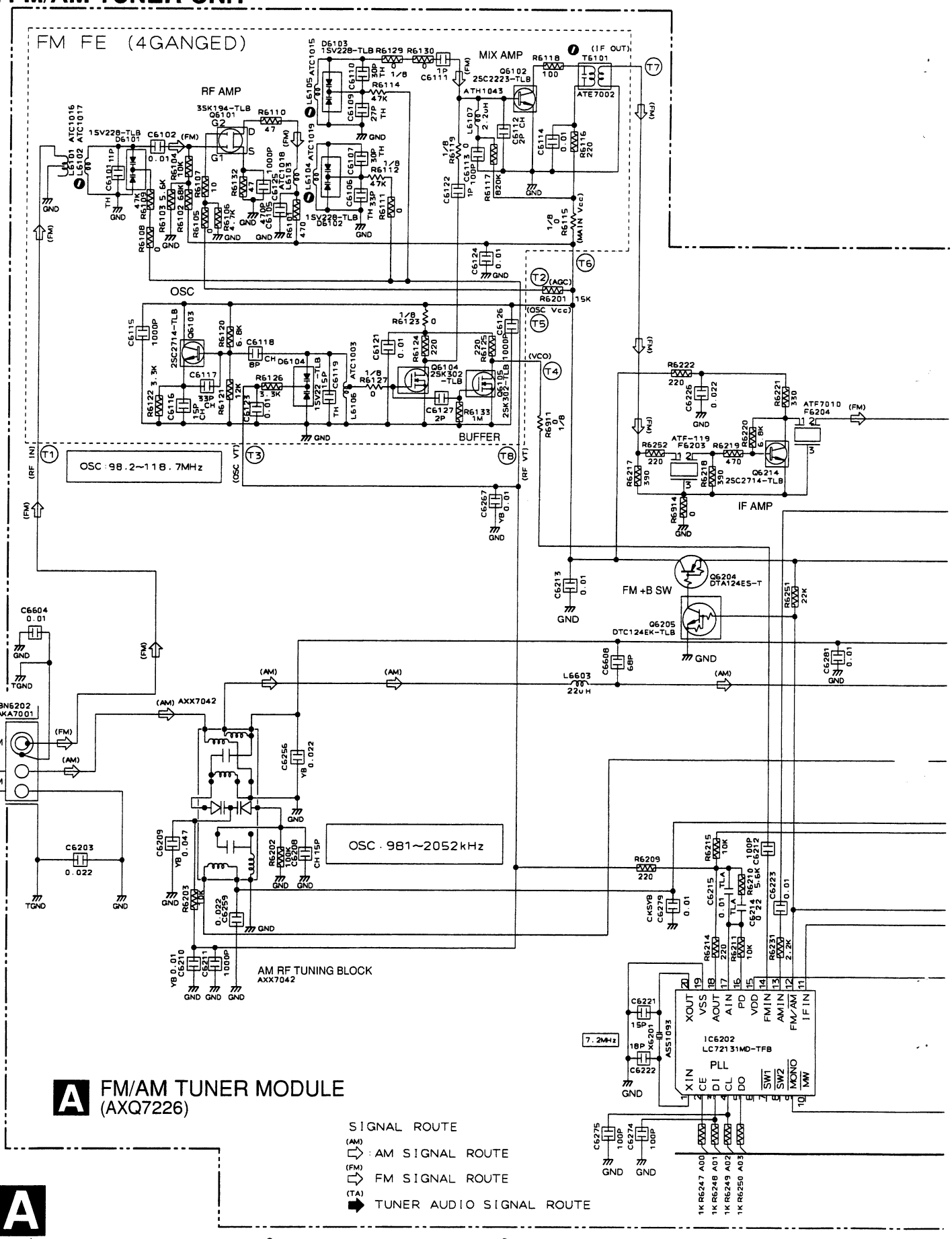
3.1 BLOCK DIAGRAM



Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".

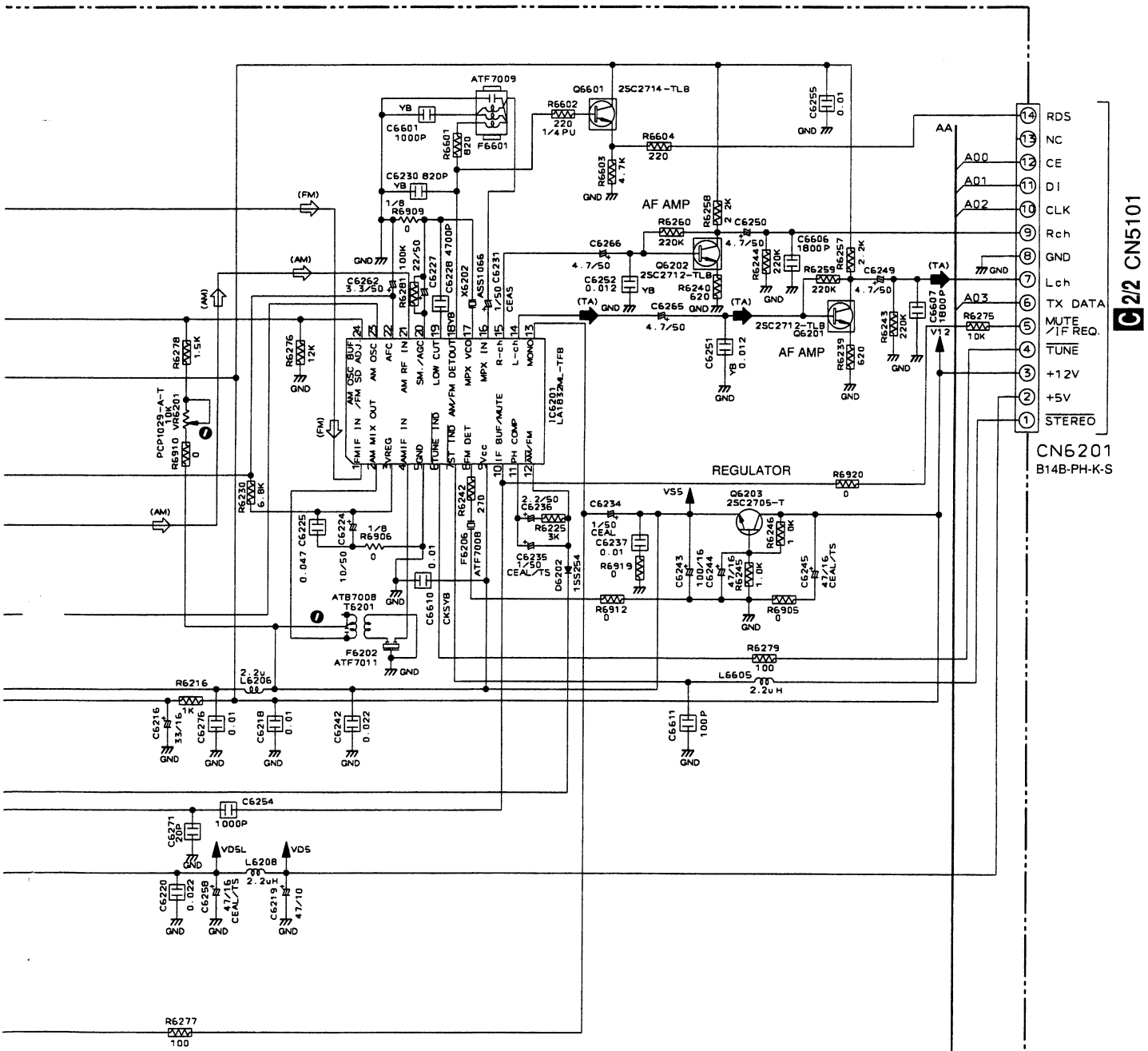


3.2 FM/AM TUNER UNIT

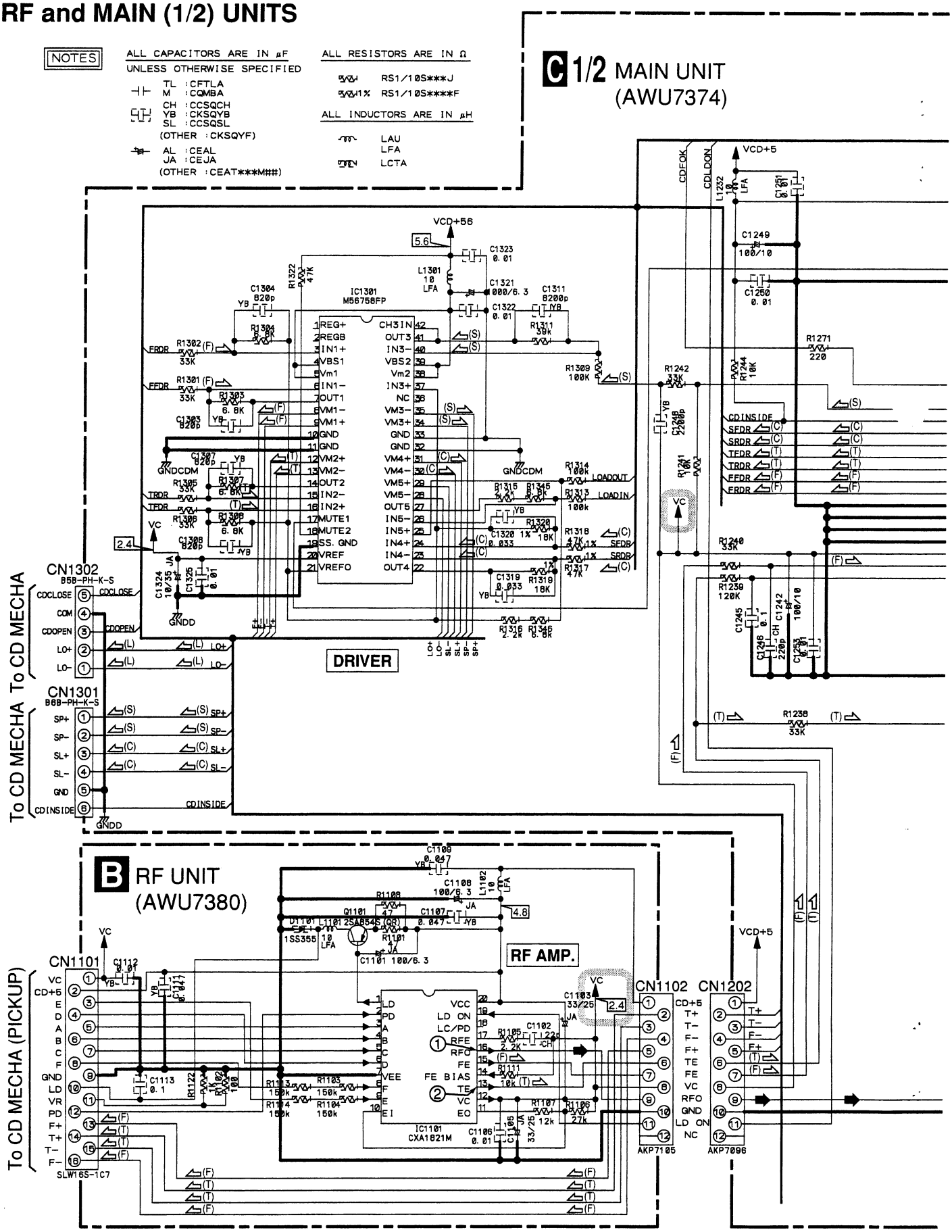


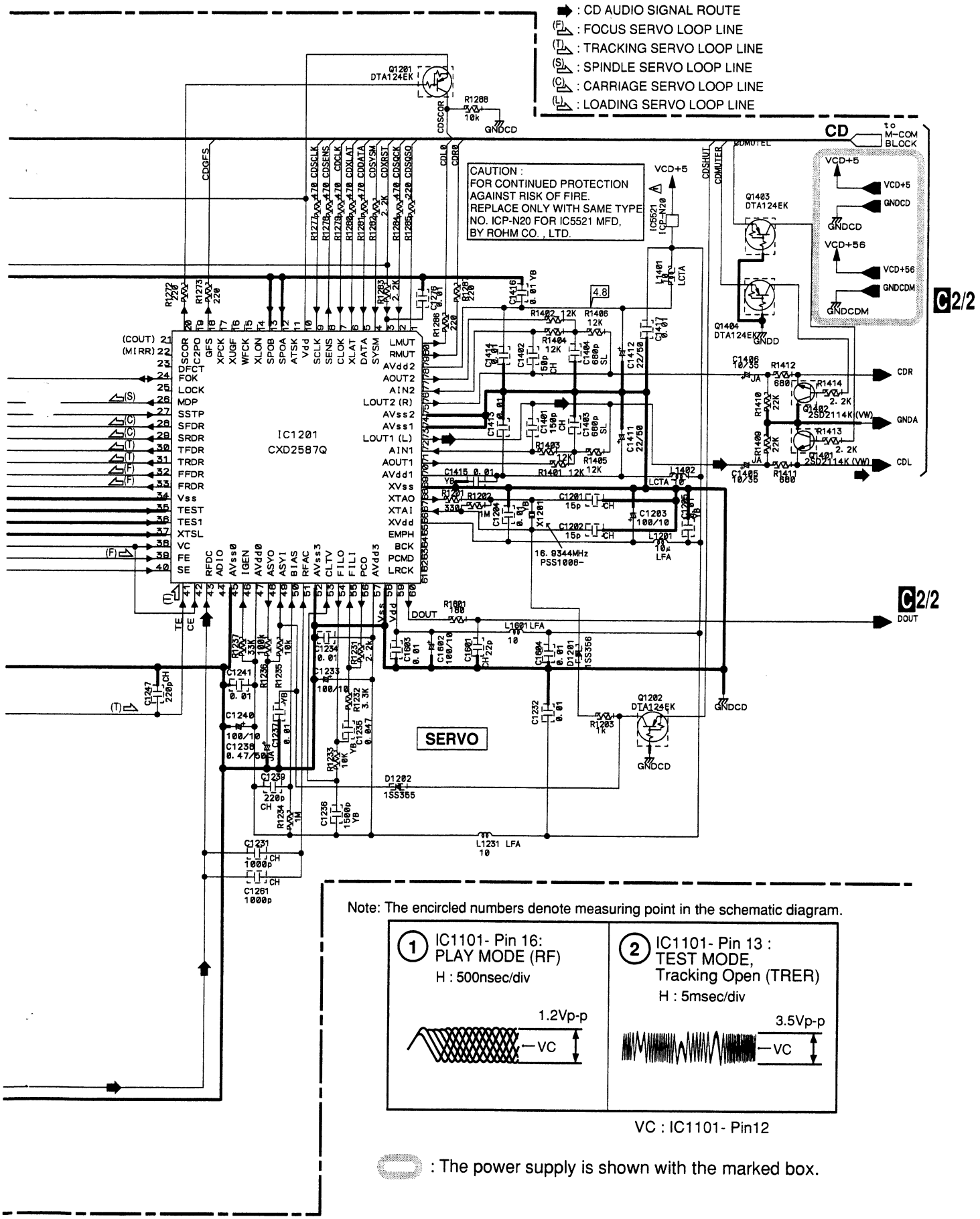
Notes

1. RESISTORS
   Indicated in Ω, 1/10W±5% Tolerance unless otherwise noted K:KΩ, M:MΩ.
2. CAPACITORS
   Indicated in Capacity(μF)/VOLTAGE(V) unless otherwise noted P:PF.
3. DIODES
   No mark diode is 1SS254.



3.3 RF and MAIN (1/2) UNITS





Note: The encircled numbers denote measuring point in the schematic diagram.

① IC1101- Pin 16: PLAY MODE (RF)	② IC1101- Pin 13 : TEST MODE, Tracking Open (TRER)
H : 500nsec/div	H : 5msec/div
1.2Vp-p, VC	3.5Vp-p, VC

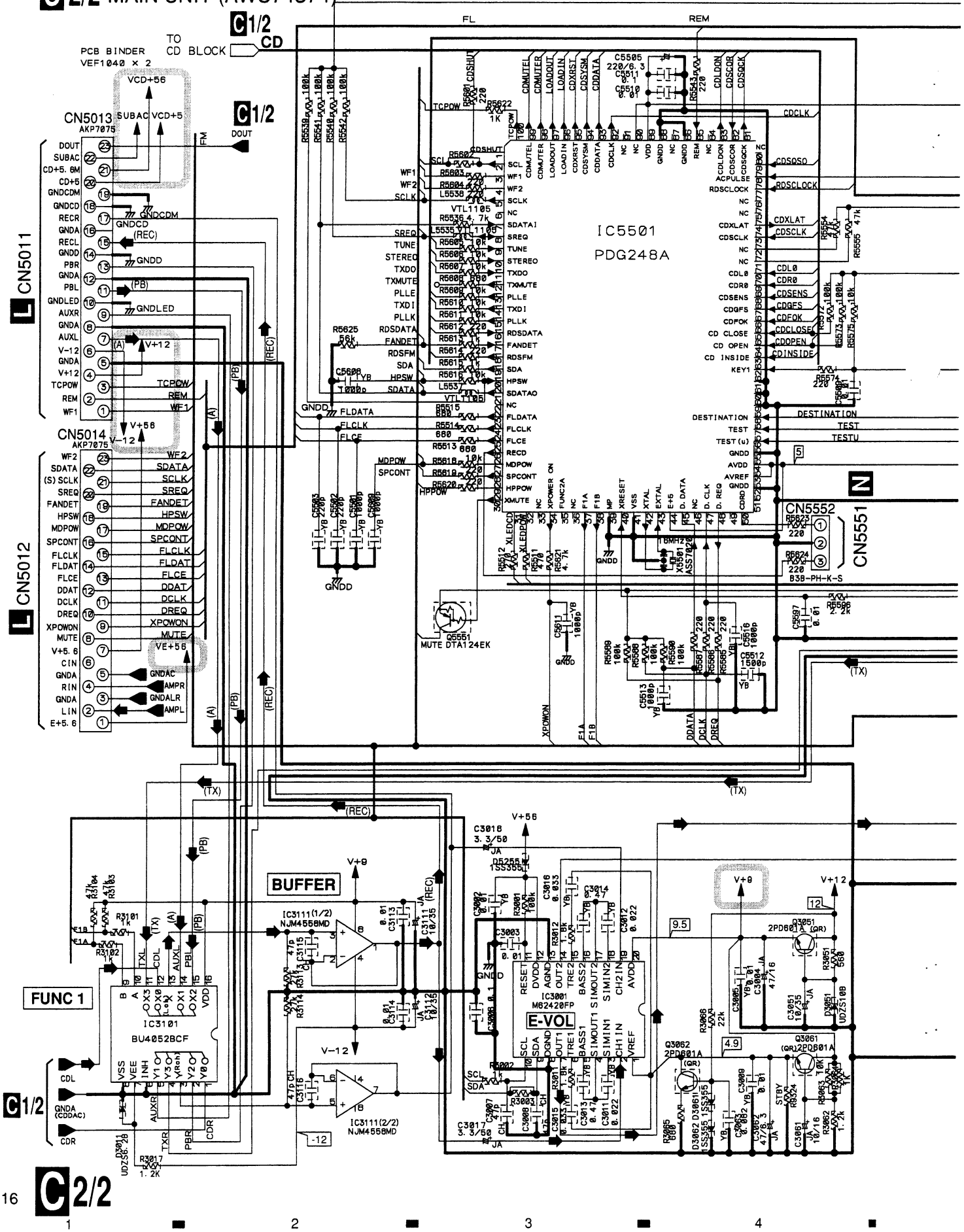
VC : IC1101- Pin12

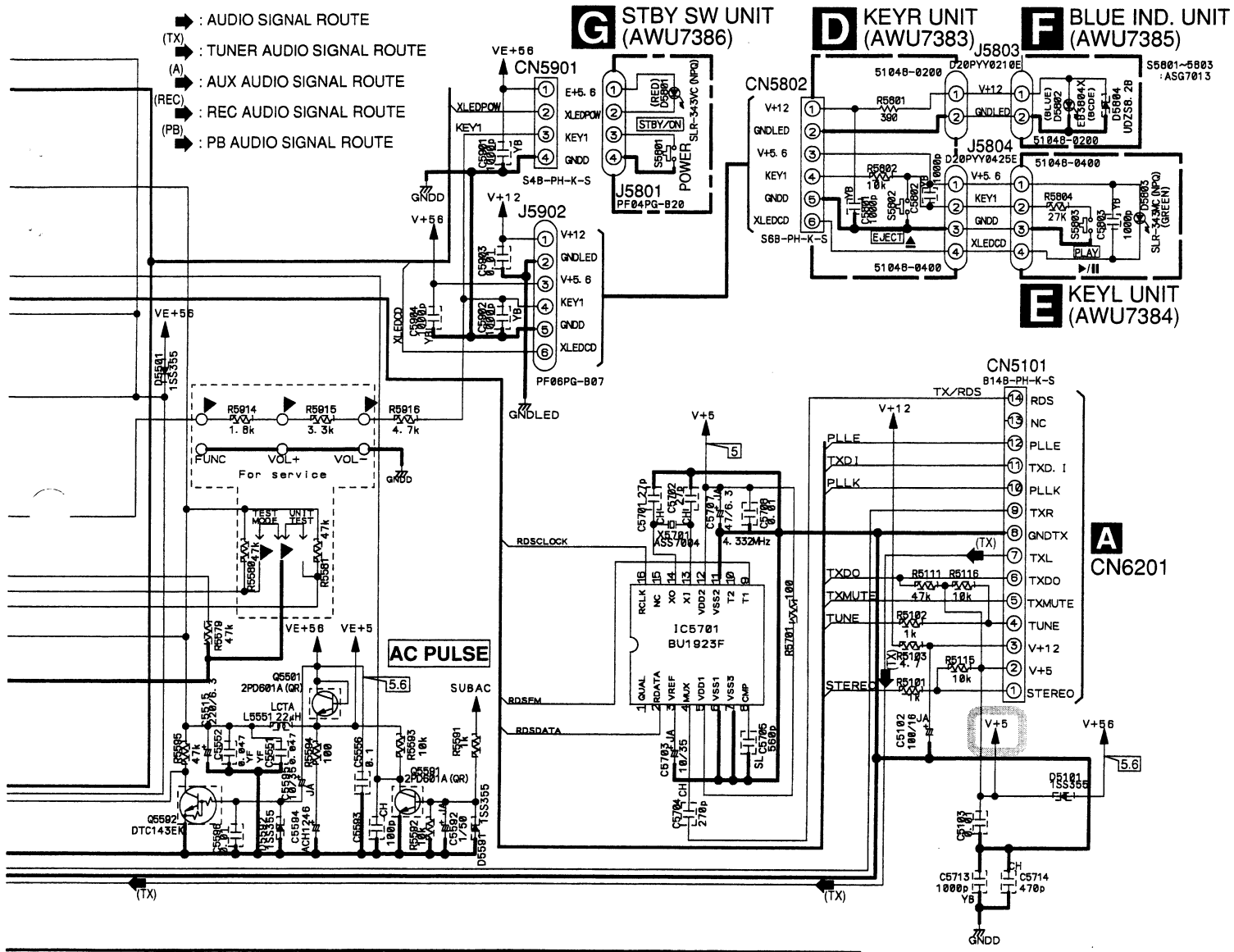
: The power supply is shown with the marked box.

3.4 MAIN (2/2), KEYR, KEYL, BLUE IND. and STBY SW UNITS

C 2/2 MAIN UNIT (AWU74374)

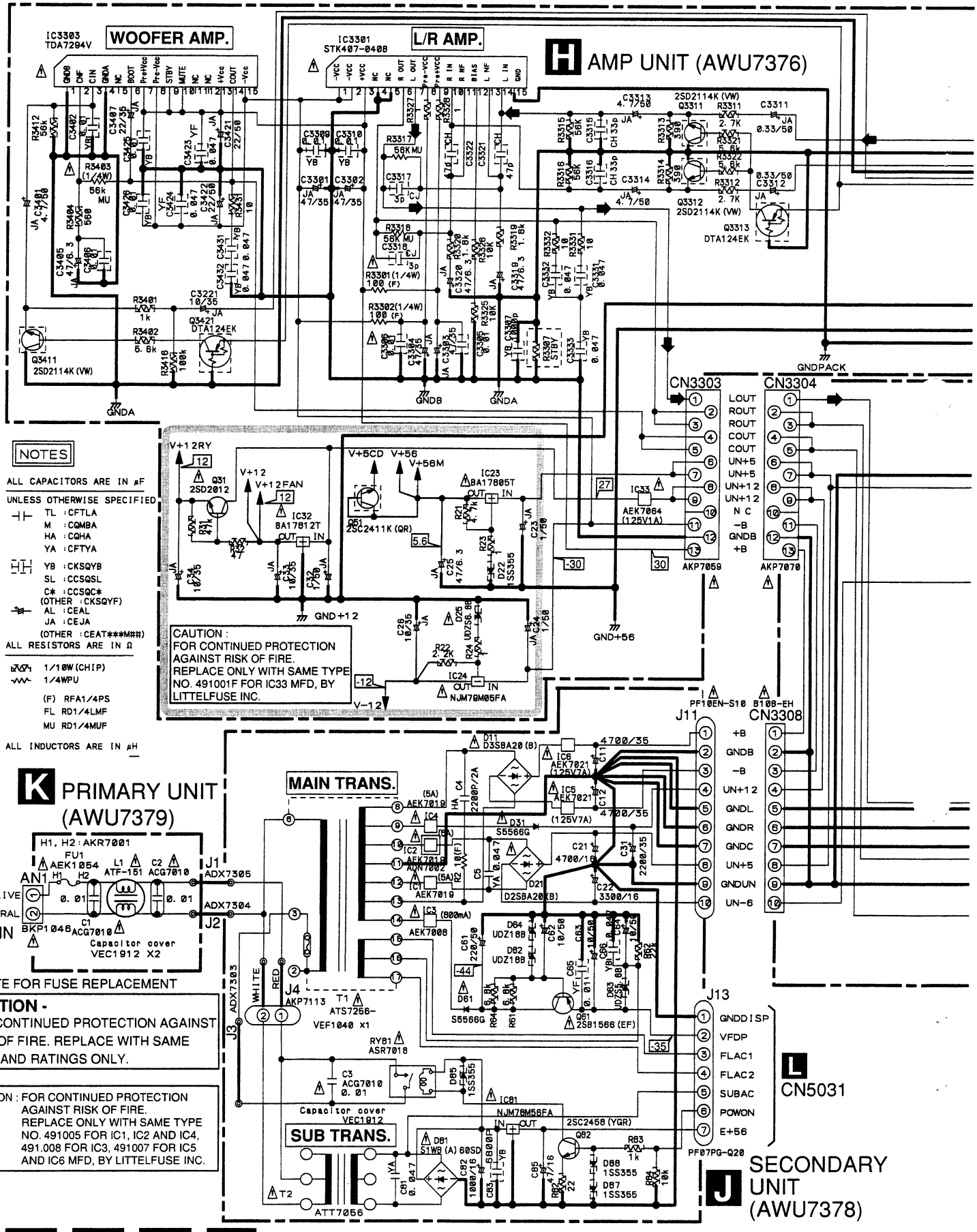
: The power supply is shown with the marked box.

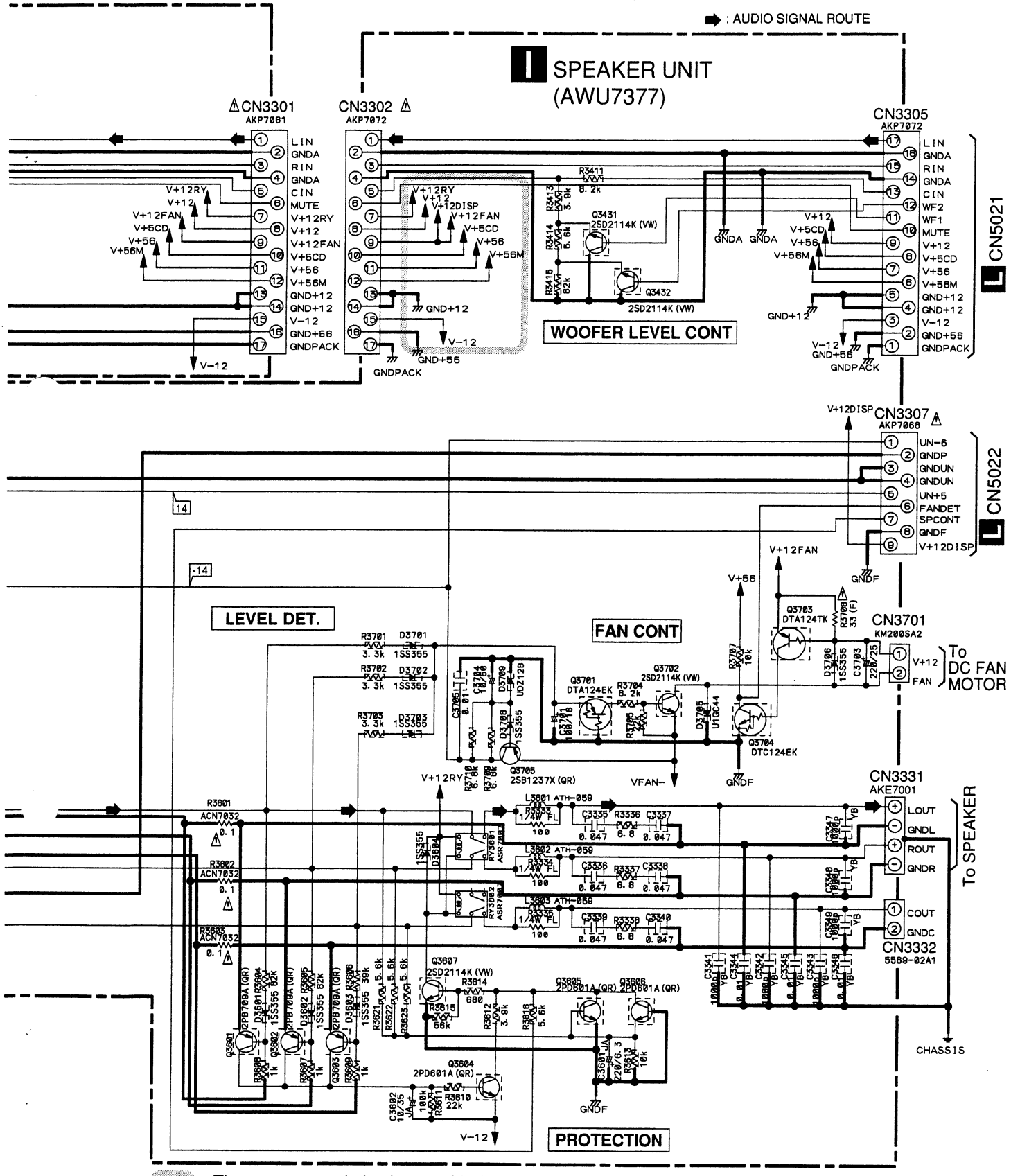



: AUDIO SIGNAL ROUTE
(TX) : TUNER AUDIO SIGNAL ROUTE
(A) : AUX AUDIO SIGNAL ROUTE
(REC) : REC AUDIO SIGNAL ROUTE
(PB) : PB AUDIO SIGNAL ROUTE
G STBY SW UNIT (AWU7386)
D KEYR UNIT (AWU7383)
F BLUE IND. UNIT (AWU7385)
E KEYL UNIT (AWU7384)
A
CN5901
CN5802
CN5101
CN6201
J5801
J5803
J5804
J5902
POWER
STBY/ON
EJECT
PLAY
FUNC
VOL+
VOL-
For service
TEST MODE
UNIT TEST
AC PULSE
SUBAC
IC5701
BU1923F
X5701
4.332MHz
RDSCLOCK
RDSDATA
RDSFM
TX/RDS
PLLE
TXDI
PLLK
TXDO
TXMUTE
TUNE
STEREO
Q5501
2PD601A(QR)
Q5502
DTC143EK
L5551 22μH
LCTA
D5501 1SS355
D5581 1SS355
D5101 1SS355
VE+56
VE+5
V+12
V+5
V+56
GNDD
GNDLED
XLEDPOW
XLEDCD
KEY1
H.P. AMP.
IC3071(1/2) BA4560F
IC3071(2/2) BA4560F
IC3201(1/2) NJM4556MD
IC3201(2/2) NJM4556MD
CENTER
HPPOW
AMPL
AMPR
AMPC
GNDALR
GNDAC
V-12
2PB709A(QR)
2PD601A(QR)
C1/2
VCD+5
VCD+56
GNDCD
GNDCDM
NOTES
ALL CAPACITORS ARE IN μF
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS ARE IN Ω
1/10W(CHIP)
1/4WPU
ALL INDUCTORS ARE IN μH
LAU
LCTA
TL :CFTLA
M :CQMBA
AL :CEAL
JA :CEJA
EV :CEV
(OTHER : CEAT***M##)
CH :CCSQCH
YB :CKSQYB
SL :CCSQSL
LS :CKLSR
(OTHER :CKSQYF)

C2/2 D E F G

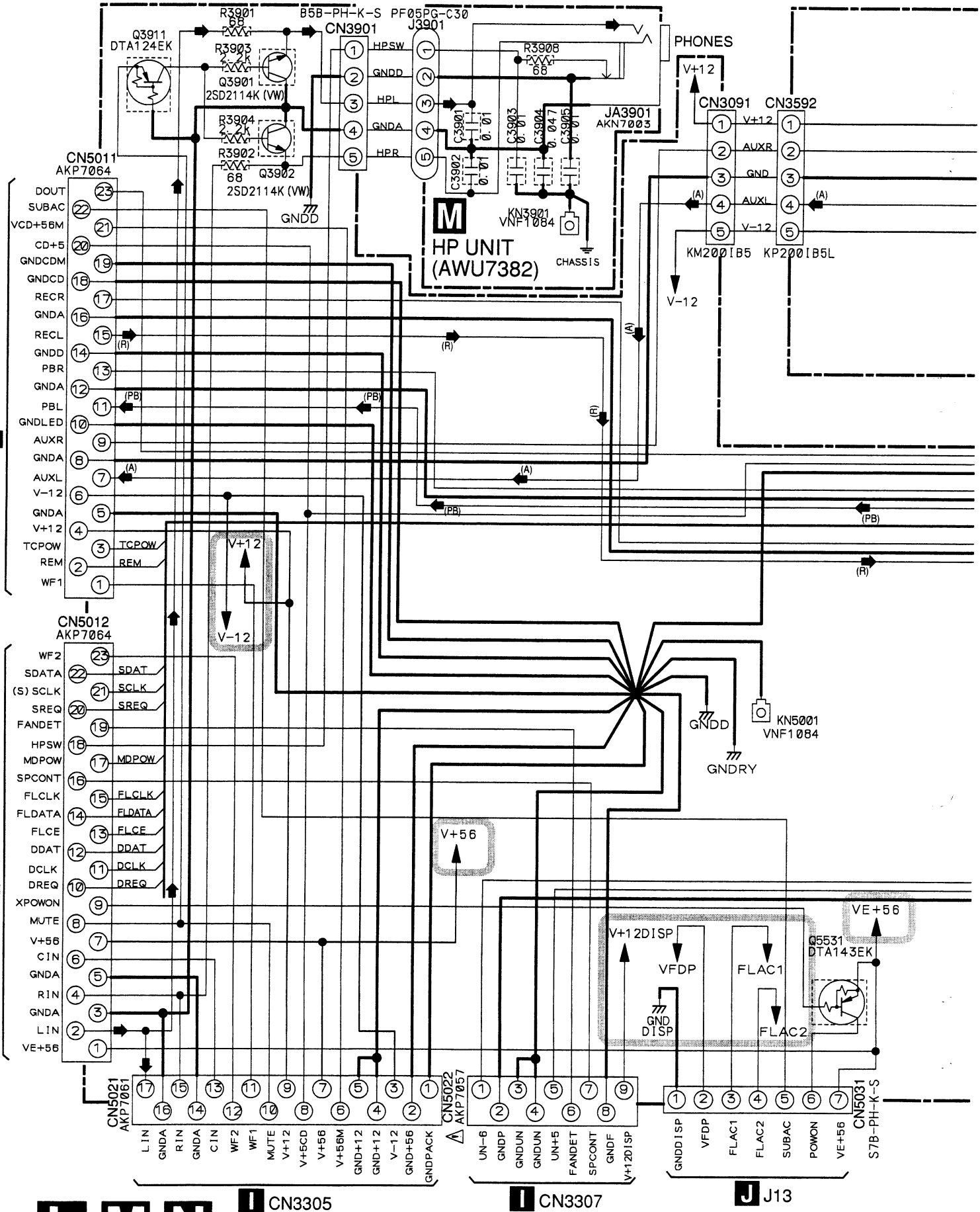
3.5 AMP, SPEAKER, SECONDARY and PRIMARY UNITS

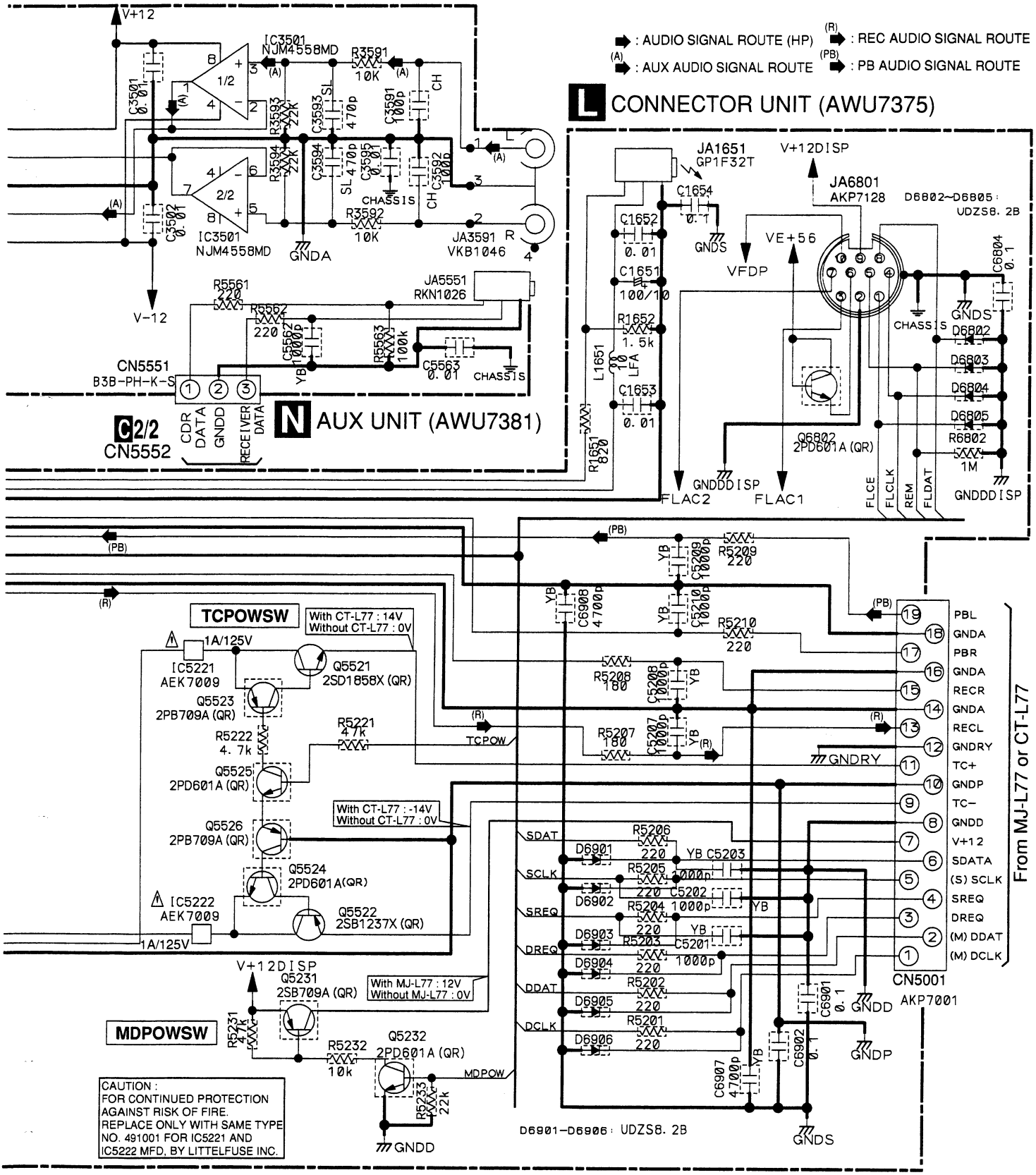

WOOFER AMP.
IC3303 TDA7294V
L/R AMP.
IC3301 STK407-040B
H AMP UNIT (AWU7376)
CN3303
CN3304
AKP7059
AKP7070
GNDPACK
GNDA
GNDB
NOTES
ALL CAPACITORS ARE IN μF
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS ARE IN Ω
ALL INDUCTORS ARE IN μH
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491001F FOR IC33 MFD, BY LITTELFUSE INC.
GND+12
GND+56
V-12
K PRIMARY UNIT (AWU7379)
MAIN TRANS.
SUB TRANS.
AC IN
LIVE
NEUTRAL
• NOTE FOR FUSE REPLACEMENT
CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE AND RATINGS ONLY.
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491005 FOR IC1, IC2 AND IC4, 491.008 FOR IC3, 491007 FOR IC5 AND IC6 MFD, BY LITTELFUSE INC.
L CN5031
J SECONDARY UNIT (AWU7378)



: The power supply is shown with the marked box.

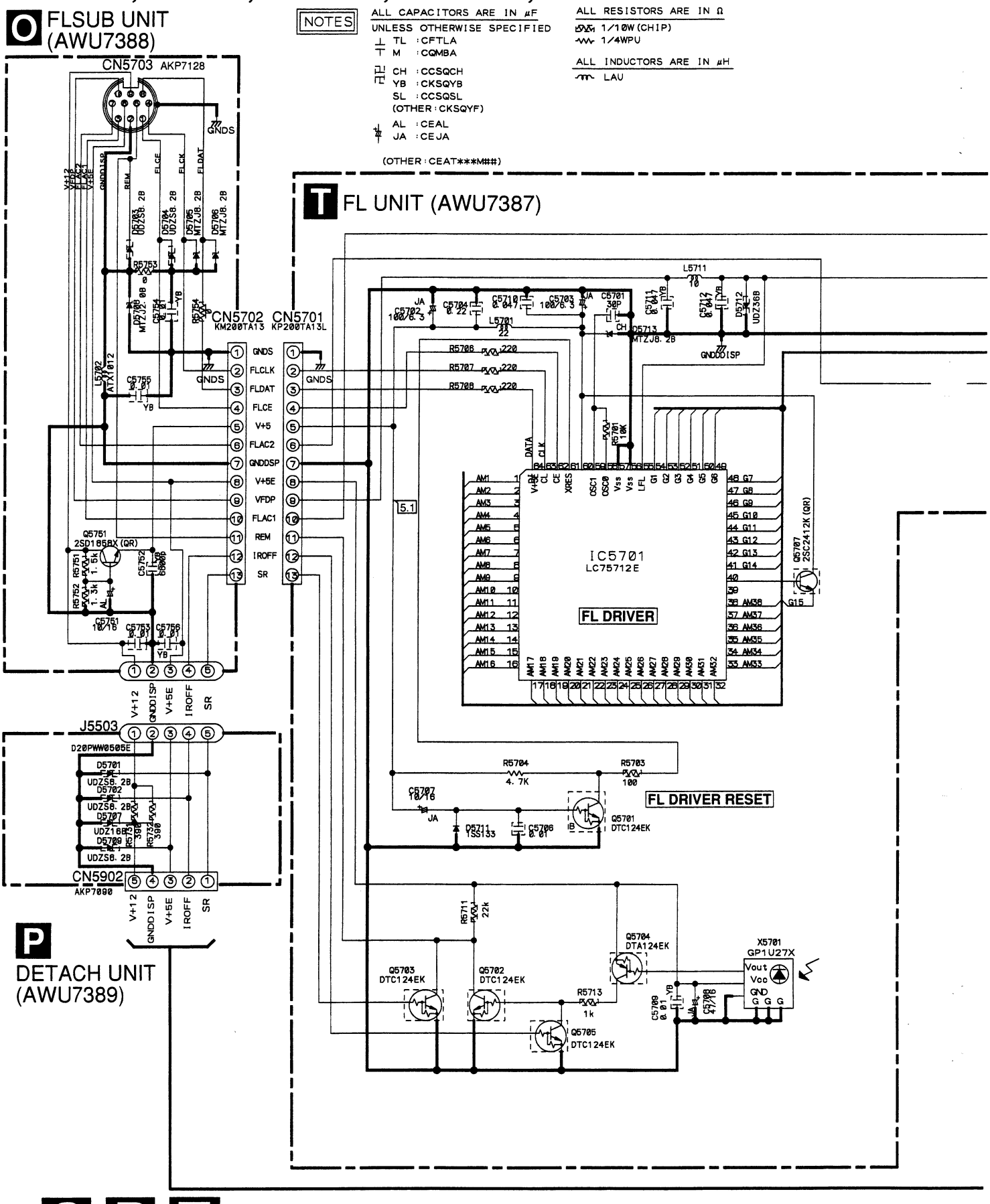
3.6 CONNECTOR, HP and AUX UNITS





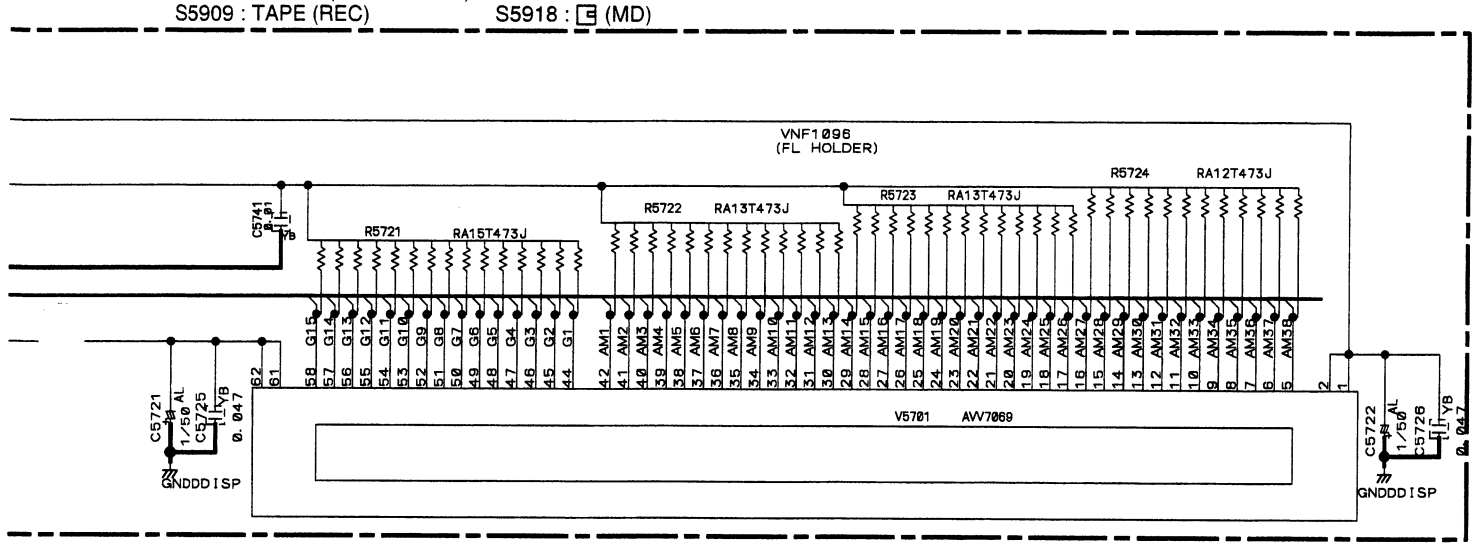
: The power supply is shown with the marked box.

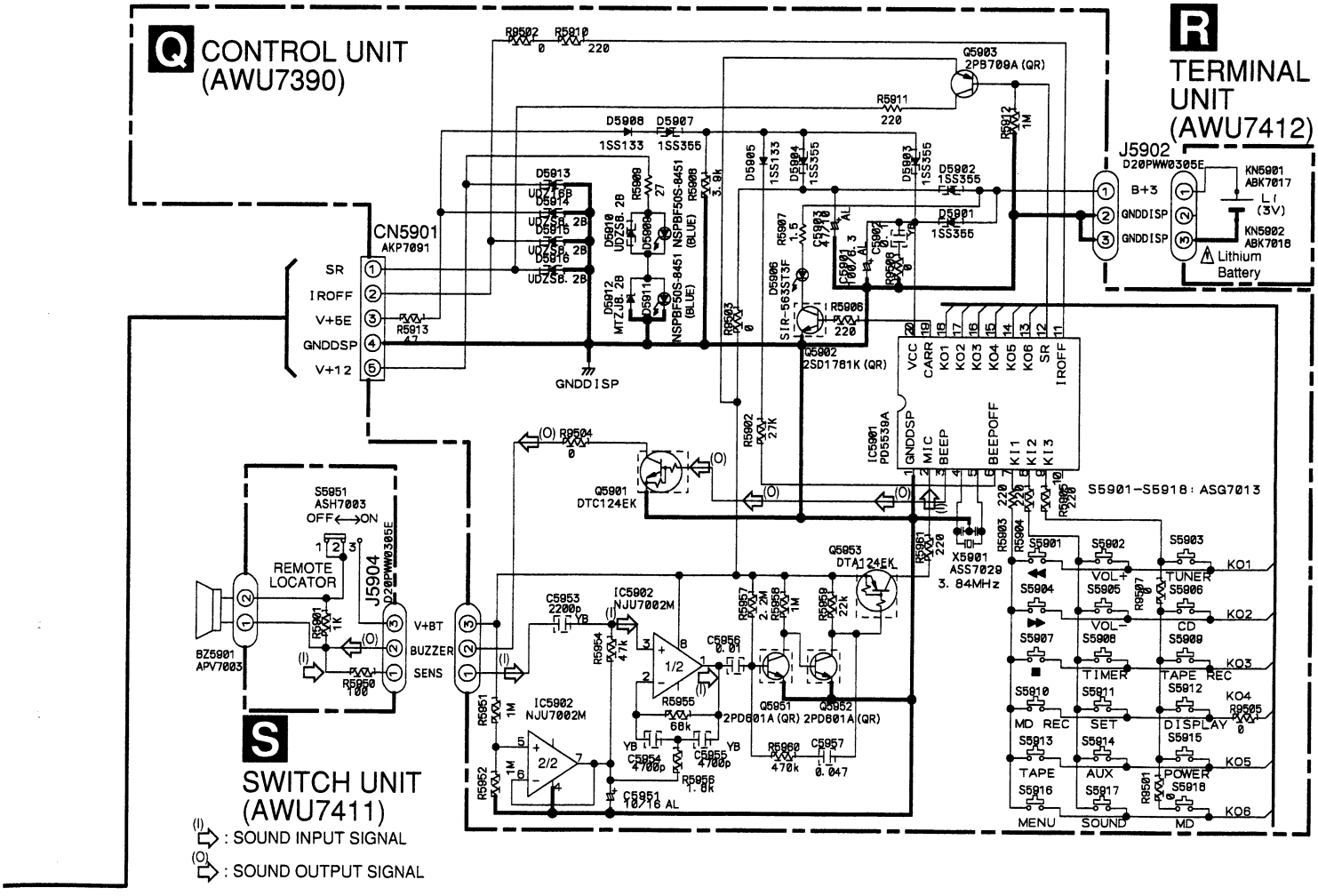
3.7 FLSUB, DETACH, CONTROL, TERMINAL, SWITCH and FL UNITS



CONTROL UNIT

S5901 : ⏮ (◀◀ –)	S5910 : MD (REC)
S5902 : ∧ (VOL)	S5911 : SET
S5903 : TUNER	S5912 : DISPLAY
S5904 : ▶▶⏭ (+ ▶▶)	S5913 : TAPE
S5905 : ∨ (VOL)	S5914 : AUX / CD-R
S5906 : CD	S5915 : ⏻ STANDBY/ON
S5907 : ■ (CANCEL)	S5916 : MENU
S5908 : TIMER/ (CHARACTER)	S5917 : SOUND
S5909 : TAPE (REC)	S5918 : MD

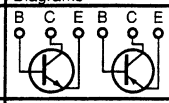
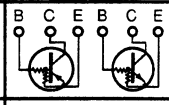
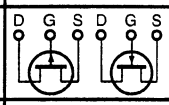
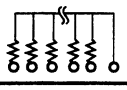




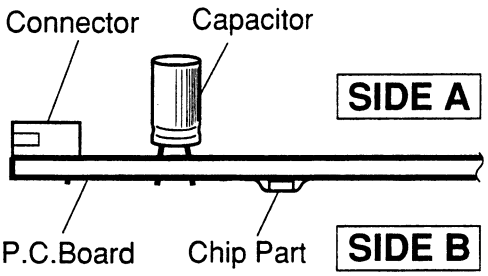
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

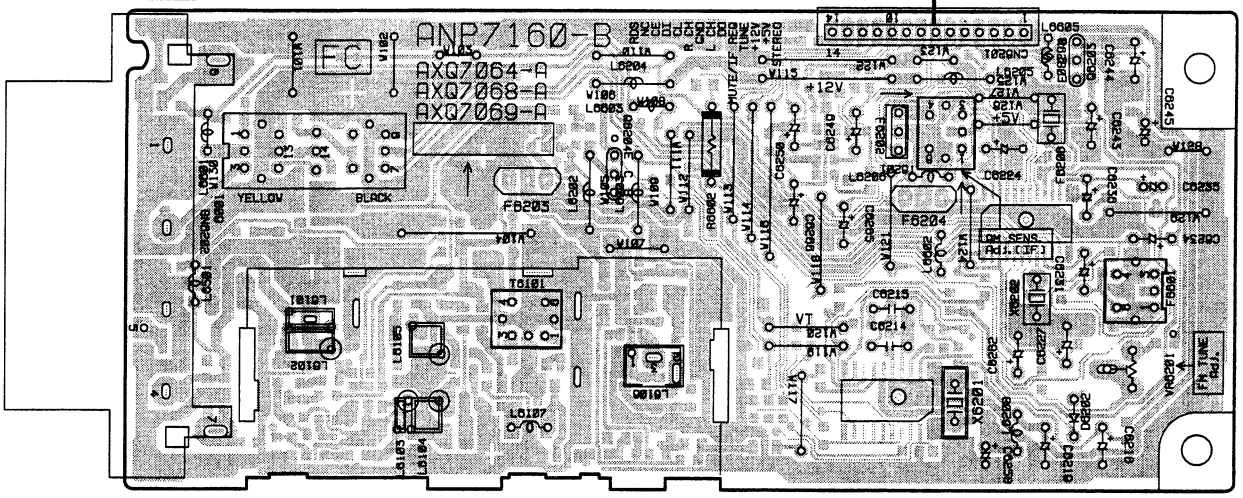
3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



4.1 FM/AM TUNER UNIT

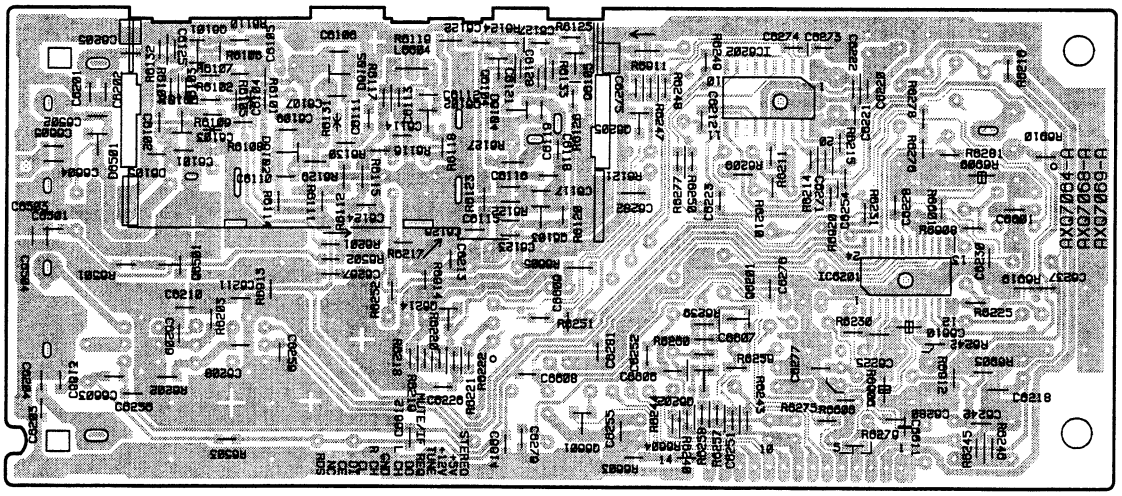
C CN5101

A FM/AM TUNER MODULE



SIDE A

A FM/AM TUNER MODULE

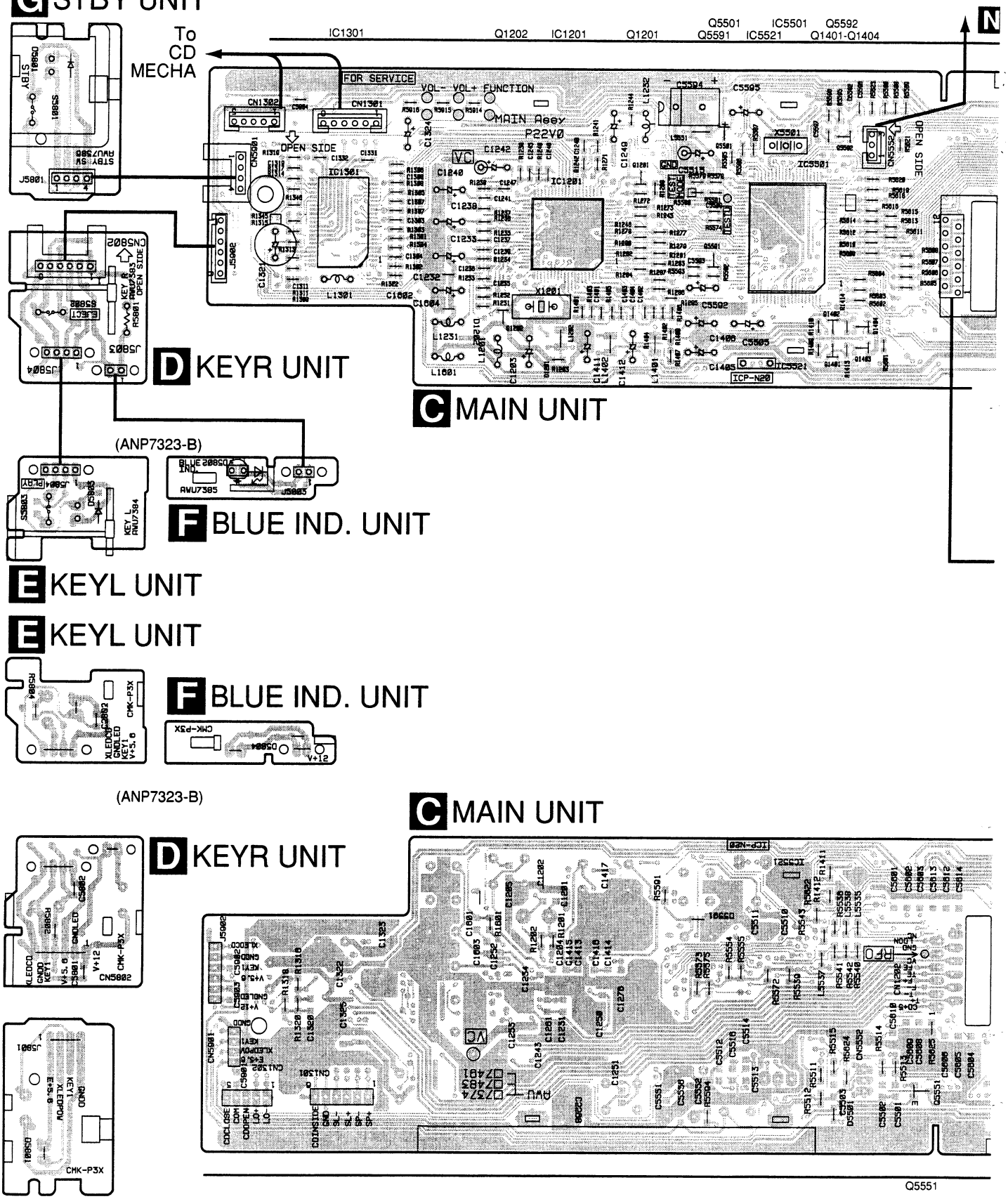


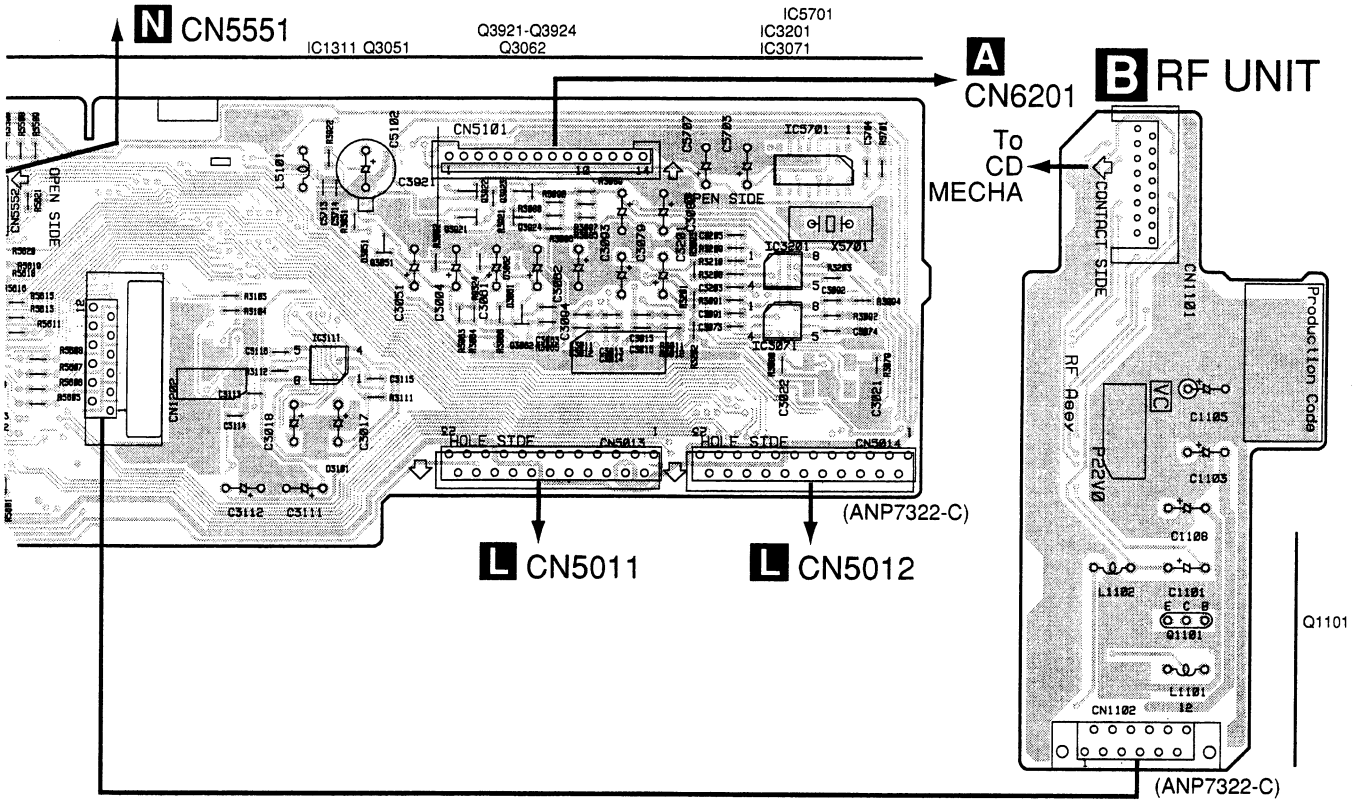
Q6101 Q6102 - Q6105 Q6205 IC6202
Q6501 Q6214 Q6601 Q6202 Q6201 IC6201

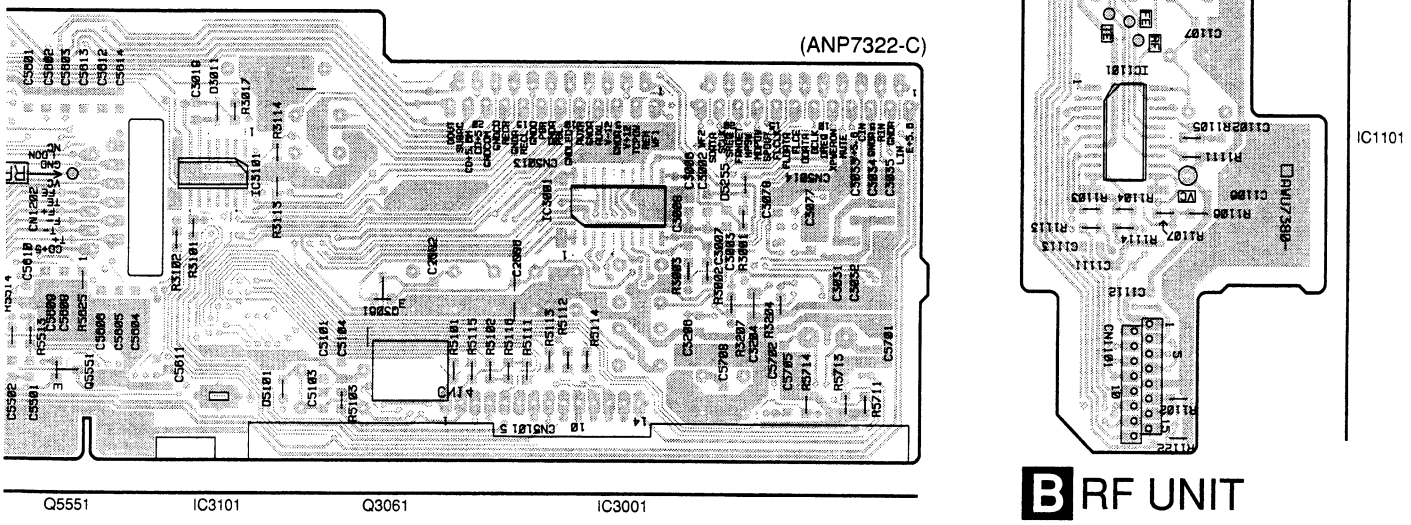
(ANP7160-B)

SIDE B

4.2 RF, MAIN, KEYR, KEYL, BLUE IND. and STBY SW UNITS

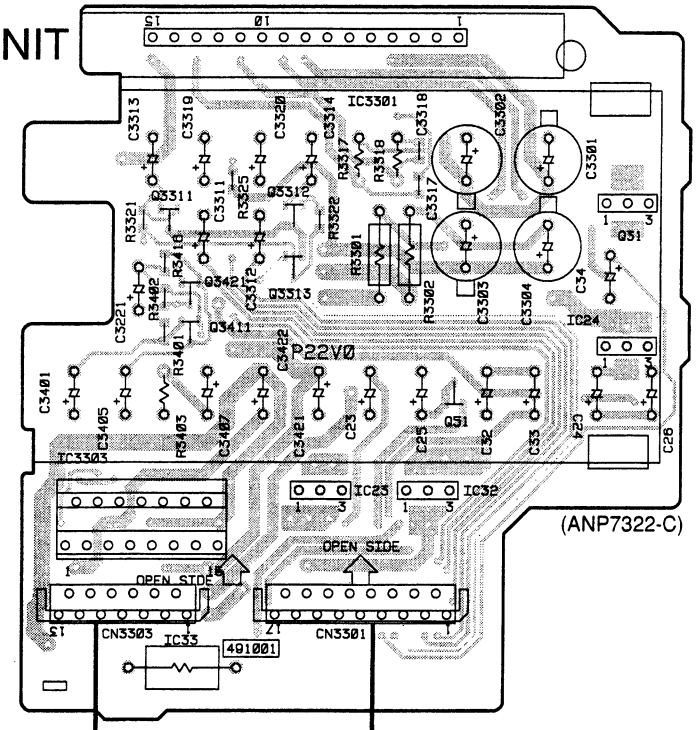



N CN5551
IC1311 Q3051
Q3921-Q3924
Q3062
IC5701
IC3201
IC3071
A CN6201
B RF UNIT
To CD MECHA
CONTRACT SIDE
RF Assy
Production Code
OPEN SIDE
HOLE SIDE
(ANP7322-C)
L CN5011
L CN5012
Q1101
SIDE A

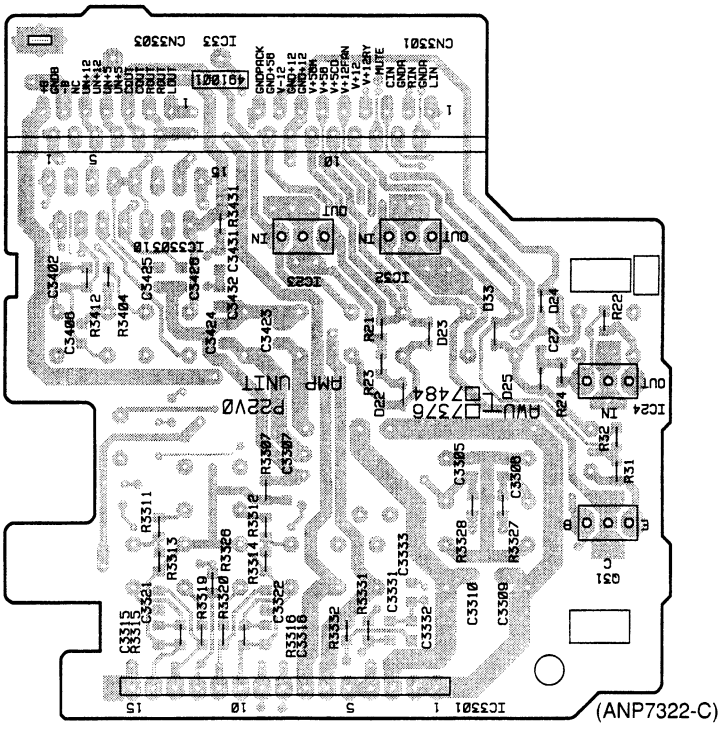

(ANP7322-C)
IC1101
B RF UNIT
Q5551
IC3101
Q3061
IC3001
SIDE B

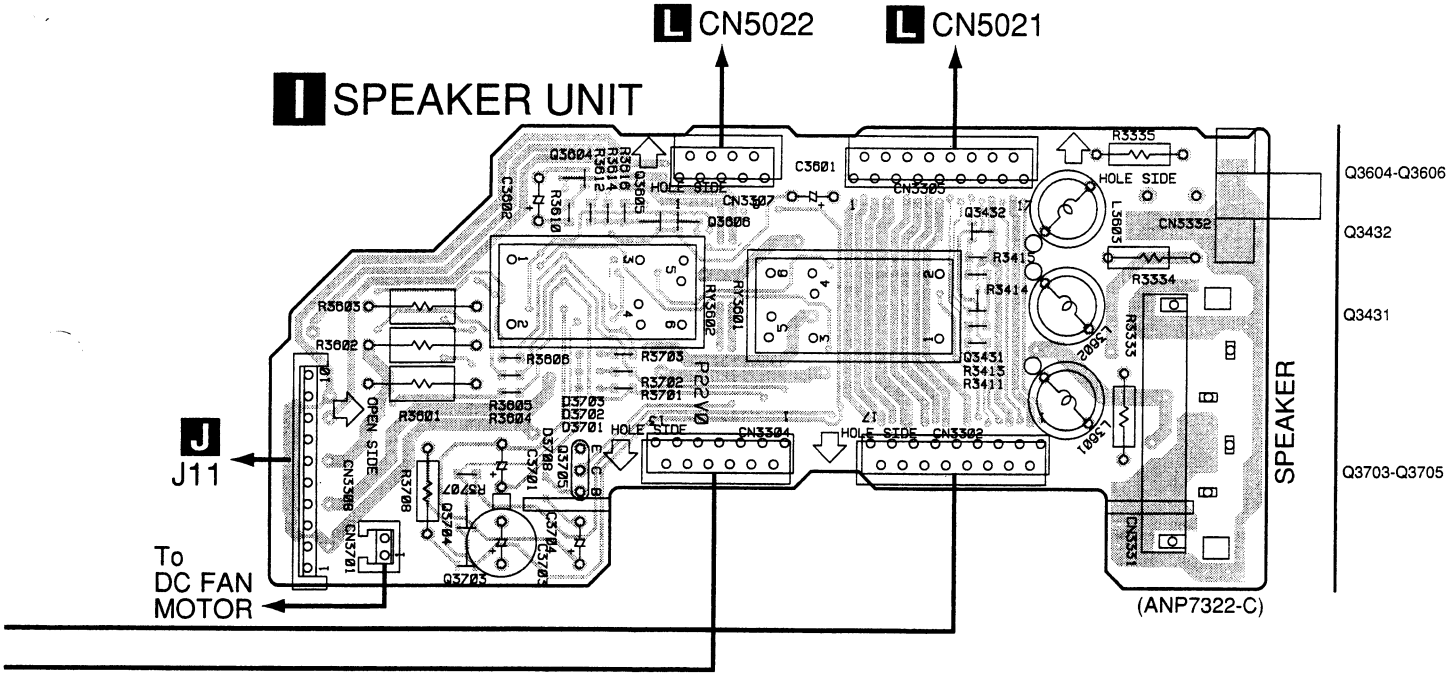
4.3 AMP and SPEAKER UNITS

H AMP UNIT

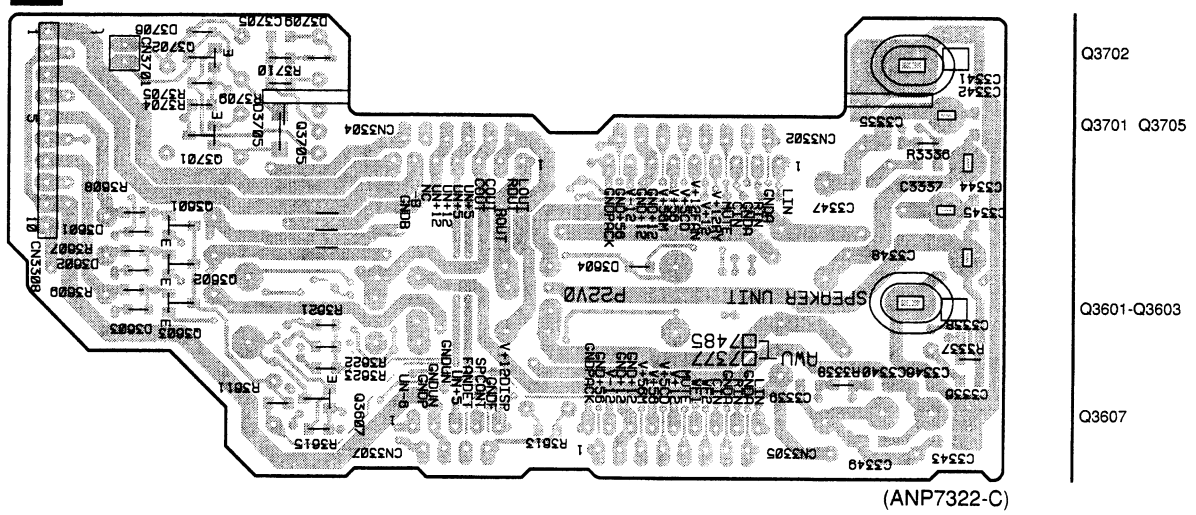


H AMP UNIT



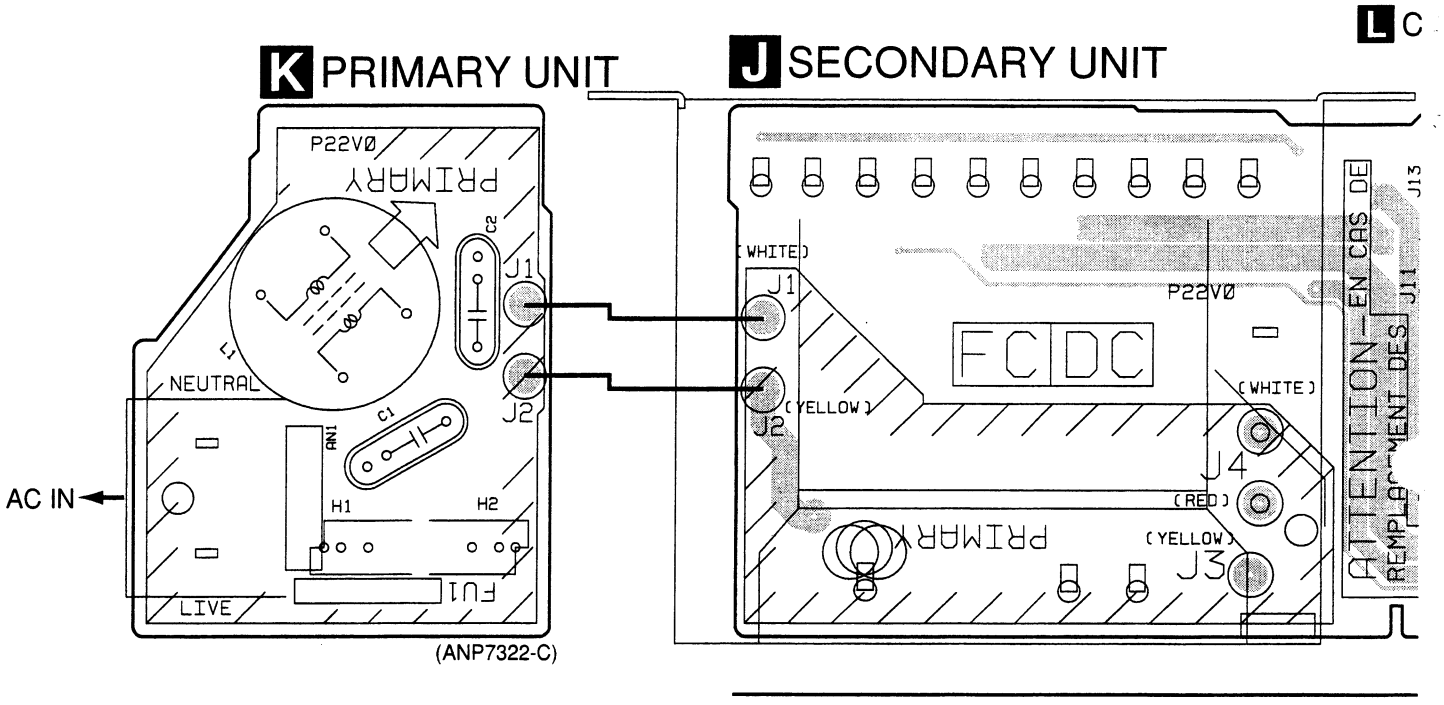

L CN5022
L CN5021
I SPEAKER UNIT
J
J11
To
DC FAN
MOTOR
SPEAKER
(ANP7322-C)
Q3604-Q3606
Q3432
Q3431
Q3703-Q3705

SIDE A

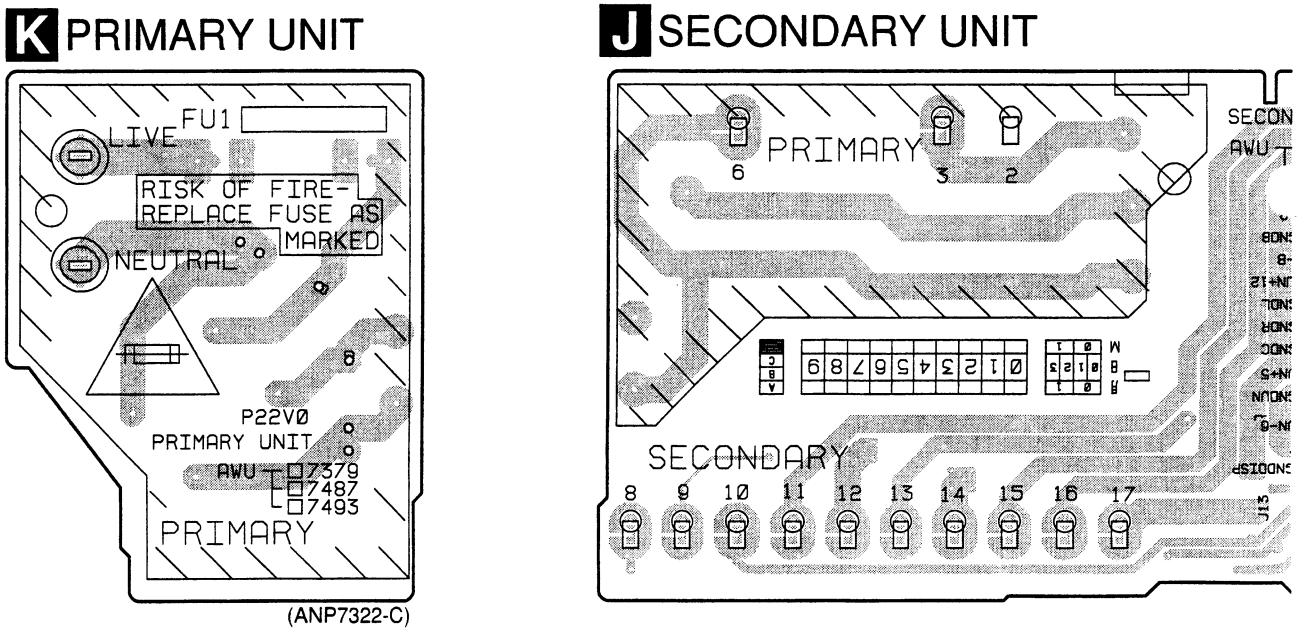

I SPEAKER UNIT
(ANP7322-C)
Q3702
Q3701 Q3705
Q3601-Q3603
Q3607

SIDE B

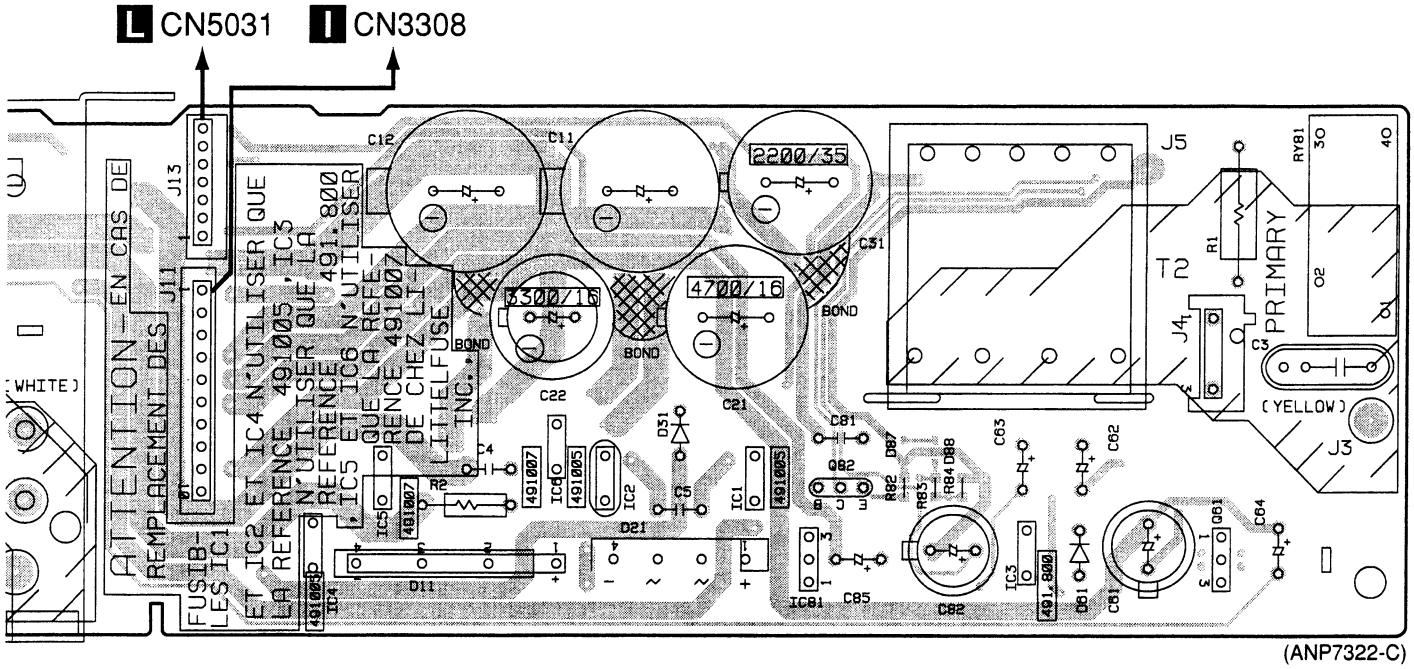
4.4 SECONDARY and PRIMARY UNITS



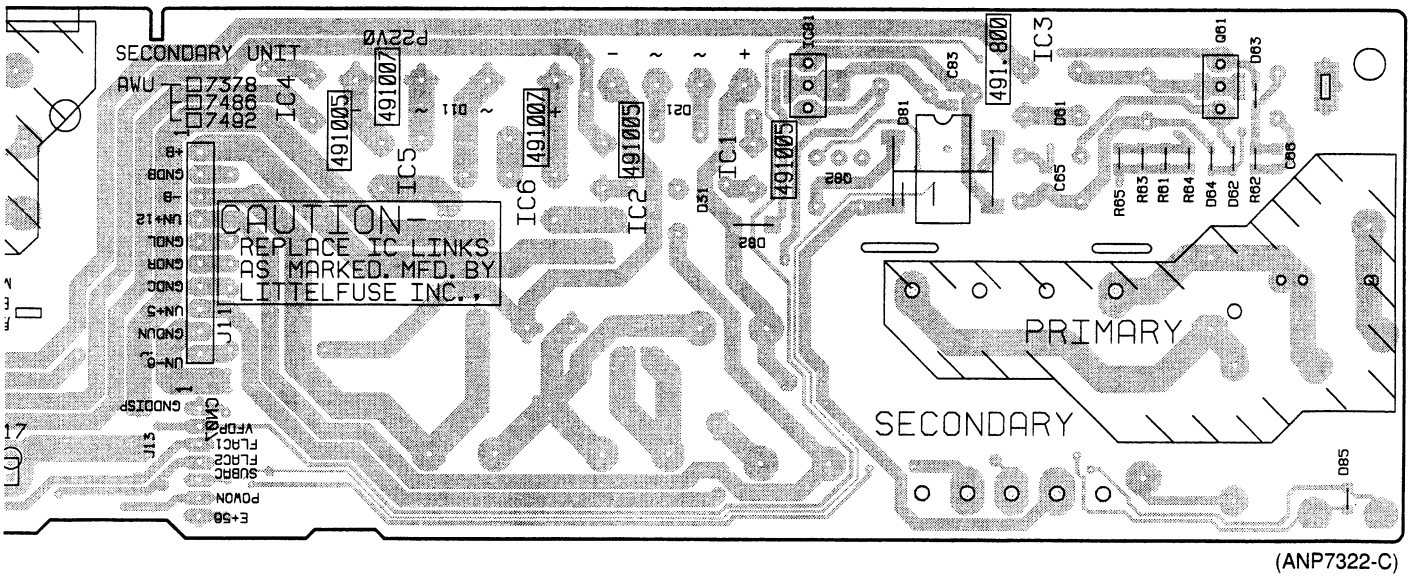
SIDE A



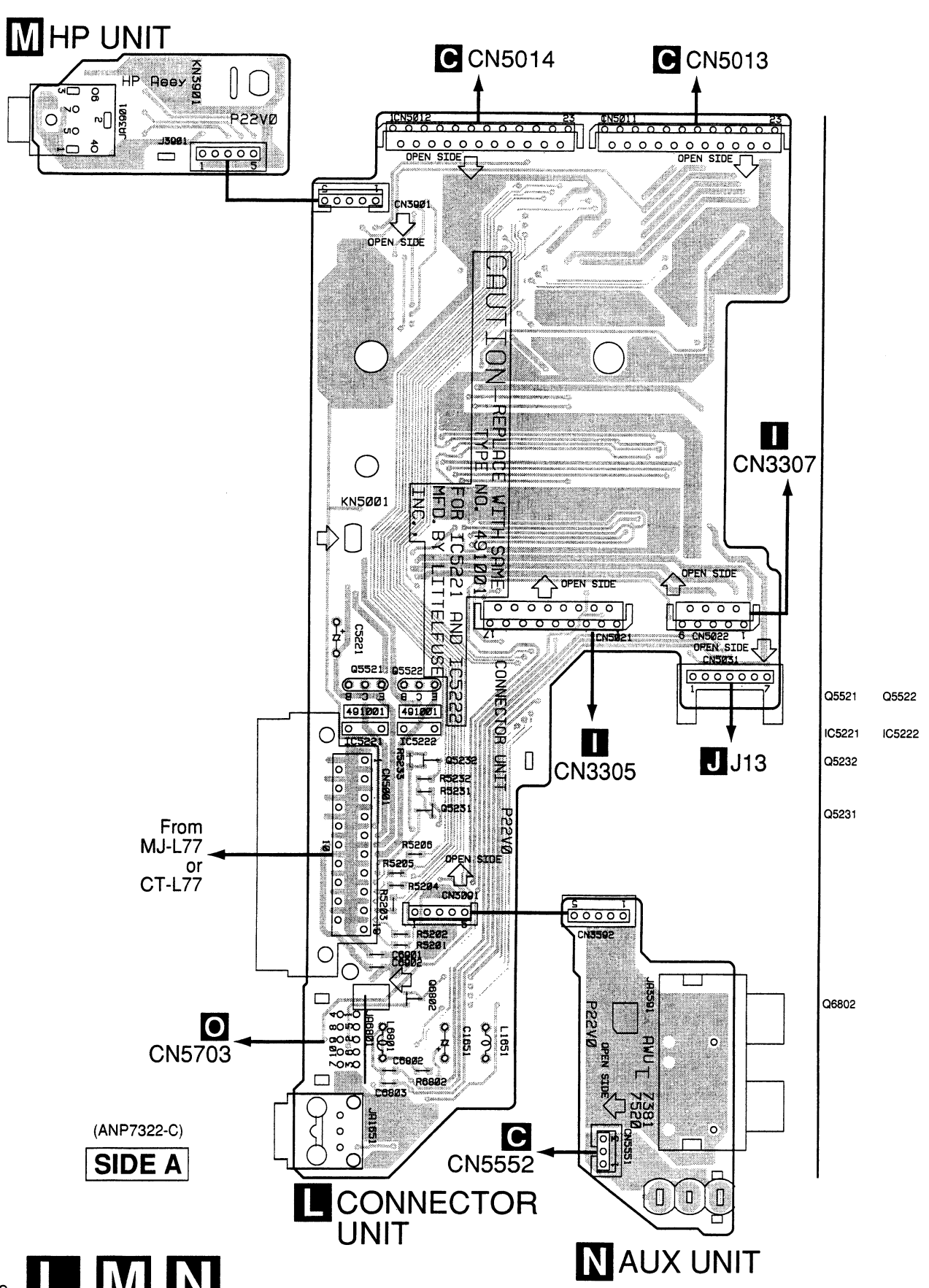
SIDE B

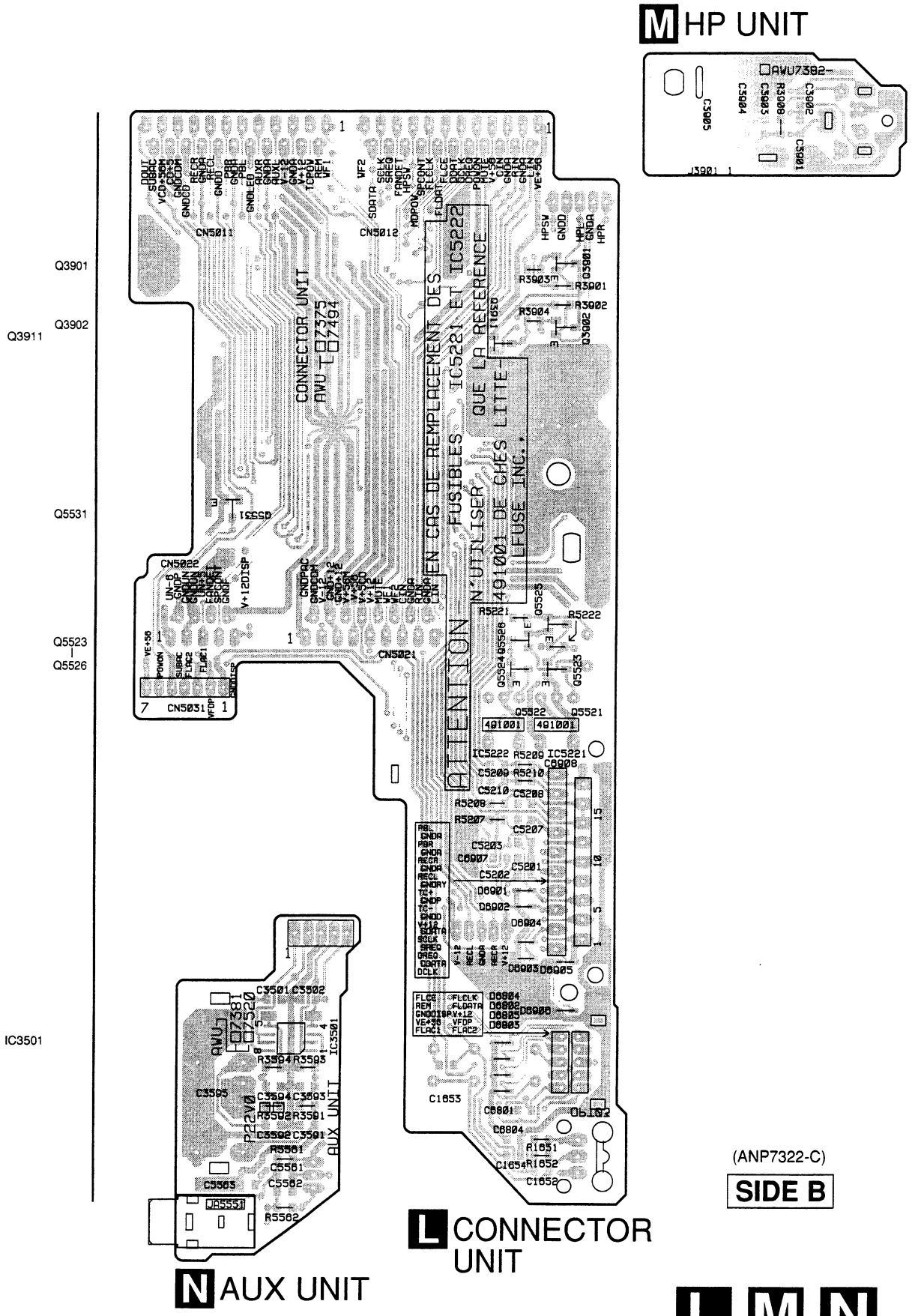

L CN5031
I CN3308
ATTENTION-EN CAS DE REMPLACEMENT DES FUSIB-LES IC1 ET IC2 ET IC4 N'UTILISER QUE LA REFERENCE 49105, IC3 N'UTILISER QUE LA REFERENCE 491.800, ICS ET IC6 N'UTILISER QUE LA REFE-RENCE 491007 DE CHEZ LITTELFUSE INC.*
2200/35
3300/16
4700/16
PRIMARY
(YELLOW)
(WHITE)
(ANP7322-C)

IC4 IC5 IC6 IC2 IC1 Q82 IC3 Q61
IC81



4.5 CONNECTOR, HP and AUX UNITS

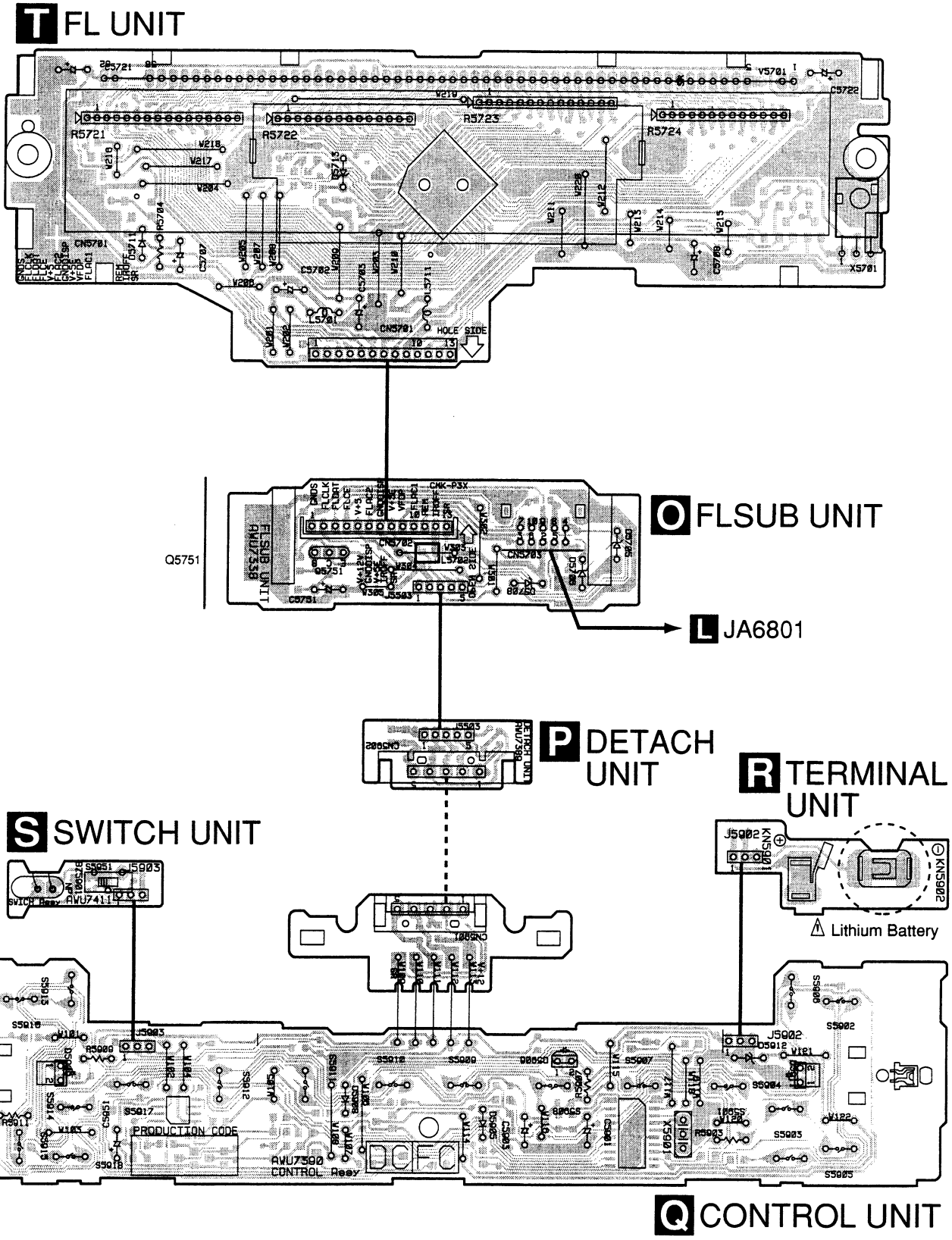




(ANP7322-C)

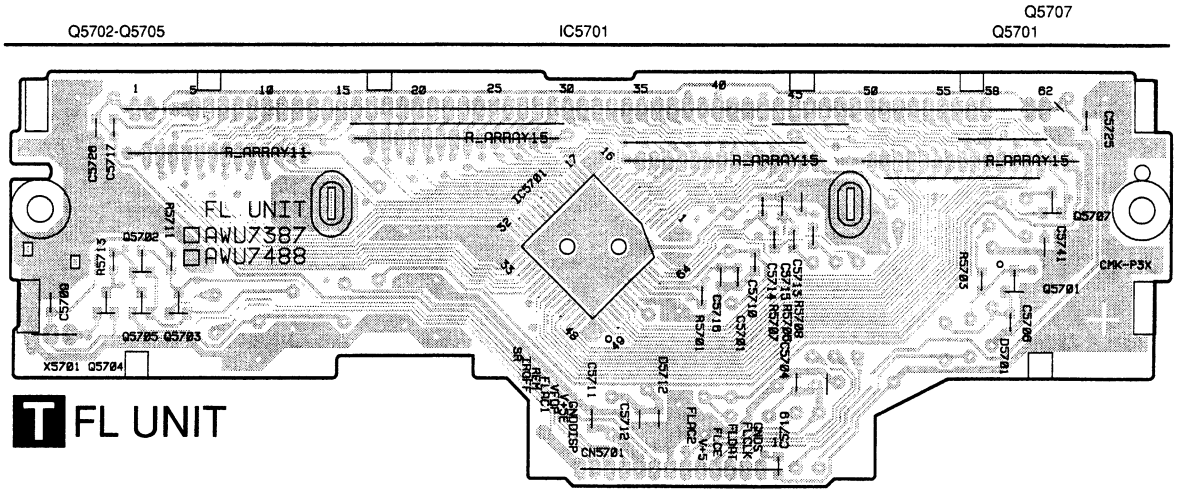
SIDE B

4.6 FLSUB, DETACH, CONTROL, TERMINAL, SWITCH and FL UNITS

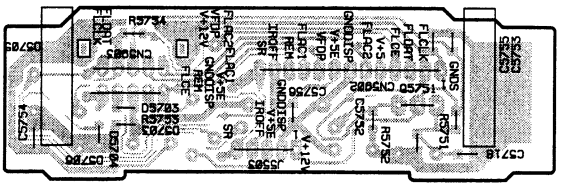


(ANP7323-B)

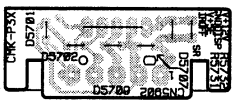
SIDE A



T FL UNIT

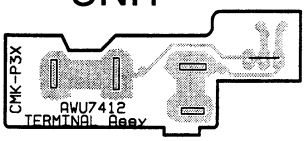


O FLSUB UNIT

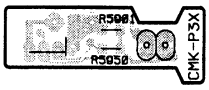


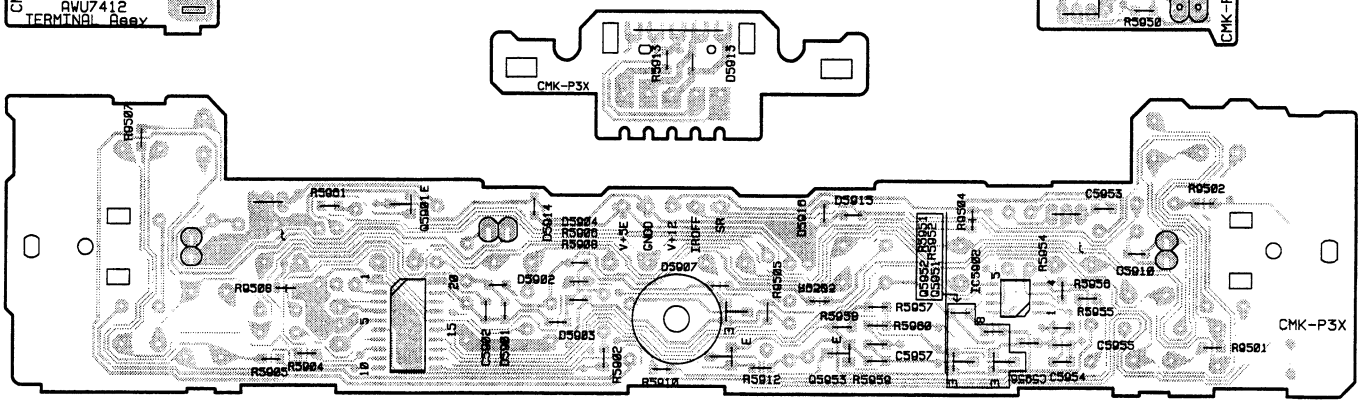
P DETACH UNIT

R TERMINAL UNIT



S SWITCH UNIT





Q CONTROL UNIT

Q5901
IC5901
Q5903
Q5902
Q5953
IC5902
Q5952 Q5951

(ANP7323-B)

SIDE B

5. PCB PARTS LIST

NOTES: ●*The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

●*When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω	→	*56 × 10¹*	→	*561* ..... *RD1/4PU 5 6 1 J*
47k Ω	→	*47 × 10³*	→	*473* ..... *RD1/4PU 4 7 3 J*
0.5 Ω	→	*R50*		..... *RN2H R 5 0 K*
1 Ω	→	*1R0*		..... *RS1P 1 R 0 K*

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω	→	*562 × 10¹*	→	*5621* ..... *RN1/4PC 5 6 2 1 F*

LIST OF PCB ASSEMBLIES

Mark	No.	Description	Part No.
		FM/AM TUNER UNIT	AXQ7226
NSP		MAINCOMP ASSY	AWM7447
		├MAIN UNIT	AWU7374
		├CONNECTOR UNIT	AWU7375
		├AMP UNIT	AWU7376
		├SPEAKER UNIT	AWU7377
		├SECONDARY UNIT	AWU7378
		├PRIMARY UNIT	AWU7379
		├RF UNIT	AWU7380
		├AUX UNIT	AWU7381
		└HP UNIT	AWU7382
		DISPCOMP ASSY	AWX7434
		├KEYR UNIT	AWU7383
		├KEYL UNIT	AWU7384
		├BLUE IND. UNIT	AWU7385
		├STBY SW UNIT	AWU7386
		├FL UNIT	AWU7287
NSP		├FLSUB UNIT	AWU7388
		├DETACH UNIT	AWU7389
		├CONTROL UNIT	AWU7390
		├SWITCH UNIT	AWU7411
		└TERMINAL UNIT	AWU7412

A FM/AM TUNER UNIT

SEMICONDUCTORS

IC6201	LA1832ML
IC6202	LC72131MD
Q6102	2SC2223
Q6203	2SC2705
Q6201, Q6202	2SC2712
Q6103, Q6214, Q6601	2SC2714
Q6104, Q6105	2SK302
Q6101	3SK194
Q6204	DTA124ES
Q6205	DTC124EK
D6202	1SS254
D6101–D6104	1SV228

COILS AND FILTERS

L6106	FM COIL	ATC1003
L6105	FM RF COIL	ATC1015
L6101	FM ANTENNA COIL	ATC1016
L6102	FM ANTENNA COIL	ATC1017
L6103	FM RF DRIVE COIL	ATC1018
L6104	FM RF TUNING COIL	ATC1019
F6203	FM CERAMIC FILTER	ATF-119
F6206	CERAMIC DISCLIMINATOR	ATF7008
F6601	ANTIBIRDY FILTER	ATF7009
F6204	CERAMIC FILTER	ATF7010
F6202	AM CERAMIC FILTER	ATF7011
L6107	TIP COIL	ATH1043
L6603		LAU220J
L6206, L6208, L6605		LAU2R2J

TRANSFORMERS

T6201	AM IF TRANSFORMER	ATB7008
T6101	FM IF TRANSFORMER	ATE7002

CAPACITORS

C6113, C6212, C6274, C6275, C6611	CCSQCH101J50
C6116, C6208, C6221	CCSQCH150J50
C6222	CCSQCH180J50
C6271	CCSQCH200J50
C6117	CCSQCH330J50
C6608	CCSQCH680J50
C6118	CCSQCH8R0D50
C6111, C6122	CCSQCK1R0C50
C6112, C6127	CCSQCK2R0C50
C6105	CCSQSL471J50
C6101	CCSQTH110J50
C6119	CCSQTH150J50
C6109	CCSQTH270J50
C6107, C6110	CCSQTH300J50
C6106	CCSQTH330J50
C6234, C6235	CEAL1R0M50
C6245	CEAL470M16
C6224	CEAT100M50
C6243	CEAT101M16
C6231	CEAT1R0M50
C6227	CEAT220M25
C6236	CEAT2R2M50
C6216	CEAT330M16
C6262	CEAT3R3M50
C6219	CEAT470M10
C6244	CEAT470M16
C6249, C6250, C6265, C6266	CEAT4R7M50
C6258	CEJA470M16
C6215	CFTLA103J50
C6214	CFTLA224J50
C6115, C6125, C6126, C6211, C6254	CKSQYB102K50
C6601	CKSQYB102K50
C6102, C6114, C6121, C6123, C6124	CKSQYB103K50
C6210, C6213, C6237, C6267, C6276	CKSQYB103K50
C6279, C6281, C6604	CKSQYB103K50

Mark	No.	Description	Part No.
	C6251, C6252		CKSQYB123K50
	C6606, C6607		CKSQYB182K50
	C6203, C6259		CKSQYB223K50
	C6228		CKSQYB472K50
	C6209		CKSQYB473K50
	C6230		CKSQYB821K50
	C6218, C6223, C6255		CKSQYF103Z50
	C6220, C6226, C6242, C6256		CKSQYF223Z50
	C6225		CKSQYF473Z50
	C6610		CKSYB103K50

RESISTORS

R6602		RD1/4PU221J
R6115, R6119, R6123, R6127, R6129		RS1/8S0R0J
R6906, R6909, R6911		RS1/8S0R0J
R6112		RS1/8S473J
VR6201 (10kΩ)		PCP1029
Other Resistors		RS1/10S□□□J

OTHERS

BN6202	ANTENNA TERMINAL	AKA7001
X6202	CERAMIC (456kHz)	ASS1066
X6201	CRYSTAL (7.2000MHz)	ASS1093
AM RF TUNING BLOCK		AXX7042

B RF UNIT

SEMICONDUCTORS

IC1101	CXA1821M
Q1101	2SA854S
D1101	1SS355

COILS AND FILTERS

L1101, L1102	LFA100J

CAPACITORS

C1102	CCSQCH220J50
C1101, C1108	CEJA101M6R3
C1103, C1105	CEJA330M25
C1112	CKSQYB103K50
C1107, C1109, C1111	CKSQYB473K50
C1106	CKSQYF103Z50
C1113	CKSQYF104Z25

RESISTORS

All Resistors	RS1/10S□□□J

OTHERS

CN1102	12P SOCKET	AKP7105
CN1101	FFC CONNECTOR	SLW16S-1C7

C MAIN UNIT

SEMICONDUCTORS

	IC3071	BA4560F
	IC5701	BU1923F
	IC3101	BU4052BCF
	IC1201	CXD2587Q
⚠	IC5521 (0.8A)	ICP-N20
	IC1301	M56758FP
	IC3001	M62420FP
	IC3111, IC3201	NJM4558MD
	IC5501	PDG248A
	Q3921, Q3923	2PB709A

Mark	No.	Description	Part No.
	Q3051, Q3061, Q3062, Q3922, Q3924		2PD601A
	Q5501, Q5591		2PD601A
	Q1401, Q1402		2SD2114K
	Q1201, Q1202, Q1403, Q1404, Q5551		DTA124EK
	Q5592		DTC143EK
	D1202, D3061, D3062, D5101, D5255		1SS355
	D5501, D5591, D5592		1SS355
	D1201		1SS356
	D3051		UDZS10B
	D3011		UDZS6.2B

COILS AND FILTERS

L1401, L1402	LCTA100J3225
L5551	LCTA220J3225
L1201, L1231, L1232, L1301, L1601	LFA100J
L5535, L5537, L5538 CHIP BEAD	VTL1105

CAPACITORS

C5594	ACH1246
C5593	CCSQCH101J50
C1231, C1261	CCSQCH102J50
C1201, C1202	CCSQCH150J50
C1401, C1402	CCSQCH151J50
C1601	CCSQCH220J50
C1239, C1246, C1247	CCSQCH221J50
C5701, C5702	CCSQCH270J50
C5704	CCSQCH271J50
C3007, C3008, C3115, C3116	CCSQCH470J50
C5714	CCSQCH471J50
C5705	CCSQSL561J50
C1403, C1404	CCSQSL681J50
C1203, C1233, C1240, C1242, C1249	CEAT101M10
C1602	CEAT101M10
C1321	CEAT102M6R3
C1411, C1412	CEAT220M50
C5505, C5515	CEAT221M6R3
C3061	CEJA100M16
C1324, C1405, C1406, C3051	CEJA100M35
C3111, C3112, C5595, C5703	CEJA100M35
C5102	CEJA101M16
C5592	CEJA1R0M50
C3017, C3018	CEJA3R3M50
C3004, C3079, C3080	CEJA470M16
C3062, C3093, C3094, C3201, C5707	CEJA470M6R3
C1238	CEJAR47M50
C3921	CEV100M16
C3021, C3022	CEV4R7M35
C3204	CKLSR683K16
C5501, C5513, C5516, C5608, C5609	CKSQYB102K50
C5611, C5713, C5901, C5902, C5904	CKSQYB102K50
C1204, C1205, C1237, C1415, C1416	CKSQYB103K50
C3002, C3005, C3009	CKSQYB103K50
C1236, C5512	CKSQYB152K50
C5502, C5503	CKSQYB221K50
C1248	CKSQYB222K50
C3011, C3012	CKSQYB223K50
C1319, C1320, C3015, C3016, C3203	CKSQYB333K50
C1235	CKSQYB473K50
C3013, C3014	CKSQYB474K16
C1303, C1304, C1307, C1308	CKSQYB821K50
C1311	CKSQYB822K50
C3063	CKSQYB823K25
C1232, C1234, C1241, C1250, C1251	CKSQYF103Z50

Mark	No.	Description	Part No.
	C1253, C1276, C1322, C1323, C1325		CKSQYF103Z50
	C1413, C1414, C1417, C1603, C1604		CKSQYF103Z50
	C3003, C3113, C3114, C5103		CKSQYF103Z50
	C5509, C5510, C5596, C5597, C5708		CKSQYF103Z50
	C5903		CKSQYF103Z50
	C1245, C3006, C5511, C5556		CKSQYF104Z25
	C3031–C3035		CKSQYF105Z16
	C5551, C5552		CKSQYF473Z50
RESISTORS			
	R1319, R1320		RS1/10S1802F
	R1317, R1318		RS1/10S4702F
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN5013, CN5014	23P SOCKET	AKP7075
	CN1202	12P PLUG	AKP7096
	X5701	CRYSTAL (4.332MHz)	ASS7004
	X5501	CERAMIC (16MHz)	ASS7020
	CN5552	KR CONNECTOR	B3B-PH-K-S
	CN1302	KR CONNECTOR	B5B-PH-K-S
	CN1301	KR CONNECTOR	B6B-PH-K-S
	J5902	CONNECTOR ASSY	PF06PG-B07
	X1201	CRYSTAL (16.9344MHz)	PSS1008
	CN5901	KR CONNECTOR	S4B-PH-K-S
	1201, 5551	PCB BINDER	VEF1040

D KEYR UNIT

Mark	No.	Description	Part No.
SWITCHES AND RELAYS			
	S5802		ASG7013
CAPACITORS			
	C5801, C5802		CKSQYB102K50
RESISTORS			
	R5801		RD1/4PU391J
	Other Resistors		RS1/10S□□□J
OTHERS			
		4P CABLE HOLDER	51048-0400
	CN5802	KR CONNECTOR	S6B-PH-K-S

E KEYL UNIT

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	D5803		SLR-343MC(NPQ)
SWITCHES AND RELAYS			
	S5803		ASG7013
CAPACITORS			
	C5803		CKSQYB102K50
RESISTORS			
	All Resistors		RS1/10S□□□J
OTHERS			
		4P CABLE HOLDER	51048-0400
	J5804	JUMPER WIRE 4P	D20PYY0425E

F BLUE IND. UNIT

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	D5802		EB3804X(BCDE)
	D5804		UDZS8.2B
OTHERS			
	J5803	JUMPER WIRE 2P	D20PYY0210E

G STBY SW UNIT

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	D5801		SLR-343VC(NPQ)
SWITCHES AND RELAYS			
	S5801		ASG7013
OTHERS			
	J5801	SMALL CONNECTOR	PF04PG-B20

H AMP UNIT

Mark	No.	Description	Part No.
SEMICONDUCTORS			
⚠	IC33 (1A)		AEK7064
⚠	IC23		BA17805T
⚠	IC32		BA17812T
⚠	IC24		NJM79M05FA
⚠	IC3301		STK407-040B
⚠	IC3303		TDA7294V
	Q51		2SC2411K
⚠	Q31		2SD2012
	Q3311, Q3312, Q3411		2SD2114K
	Q3313, Q3421		DTA124EK
	D22		1SS355
⚠	D25		UDZS6.8B
CAPACITORS			
	C3315, C3316		CCSQCH330J50
	C3321, C3322		CCSQCH470J50
	C3317, C3318		CCSQCJ3R0C50
	C26, C3221, C33, C34		CEJA100M35
	C23, C24, C32		CEJA1R0M50
	C3407, C3421, C3422		CEJA220M35
	C3301–C3304		CEJA470M35
	C25, C3319, C3320, C3405		CEJA470M6R3
	C3313, C3314, C3401		CEJA4R7M50
	C3311, C3312		CEJAR33M50
	C3307		CKSQYB102K50
	C3309, C3310, C3402, C3425, C3426		CKSQYB103K50
	C3331–C3333, C3431, C3432		CKSQYB473K50
	C3305, C3306, C3406		CKSQYF103Z50
	C3423, C3424		CKSQYF473Z50
RESISTORS			
	R3317, R3318, R3403		RD1/4MUF563J
⚠	R3301, R3302		RFA1/4PS101J
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN3303	13P PLUG	AKP7059
	CN3301	17P PLUG	AKP7061
	3301	PCB BINDER	VEF1040

Mark	No.	Description	Part No.

I SPEAKER UNIT

SEMICONDUCTORS

	Q3601–Q3603	2PB709A
	Q3604–Q3606	2PD601A
	Q3705	2SB1237X
	Q3431, Q3432, Q3607, Q3702	2SD2114K
	Q3701	DTA124EK
	Q3703	DTA124TK
	Q3704	DTC124EK
	D3601–D3604, D3701–D3703, D3706	1SS355
	D3708	1SS355
	D3705	U1GC44
	D3709	UDZ12B

COILS AND FILTERS

⚠	L3601–L3603 AF COIL	ATH-059

SWITCHES AND RELAYS

	RY3601,RY3602	ASR7007

CAPACITORS

	C3704	CEAT100M50
	C3701	CEAT101M16
	C3703	CEAT221M25
	C3602	CEJA100M35
	C3601	CEJA221M6R3
	C3341–C3343, C3347–C3349	CKSQYB102K50
	C3344–C3346	CKSQYB103K50
	C3705	CKSQYF103Z50
	C3335–C3340	CKSQYF473Z50

RESISTORS

⚠	R3601–R3603 (0.1Ω/1W)	ACN7032
	R3333–R3335	RD1/4LMF101J
	R3708	RFA1/4PS330J
	Other Resistors	RS1/10S□□□J

OTHERS

	CN3332	2P CONNECTOR	5569-02A1
	CN3331	4P SPEAKER TERMINAL	AKE7001
	CN3307	9P SOCKET	AKP7068
	CN3304	13P SOCKET	AKP7070
	CN3302, CN3305	17P SOCKET	AKP7072

J SECONDARY UNIT

SEMICONDUCTORS

⚠	IC3 (800mA)	AEK7008
⚠	IC1, IC2, IC4 (5A)	AEK7019
⚠	IC5, IC6(7A)	AEK7021
⚠	IC81	NJM78M56FA
⚠	Q61	2SB1566
	Q82	2SC2458
	D85, D87, D88	1SS355
⚠	D21	D2SBA20(B)
⚠	D11	D3SBA20(B)
⚠	D81	S1WB(A)60SD
⚠	D31, D61	S5566G(TPB2)
	D62, D64	UDZ18B
	D63	UDZS5.6B

TRANSFORMERS

⚠	T2 STANDBY TRANSFORMER	ATT7056

SWITCHES AND RELAYS

⚠	RY81	ASR7018

CAPACITORS

⚠	C3 (0.01µF/AC250V)	ACG7010
	C62–C64	CEAT100M50
	C82	CEAT102M16
	C61	CEAT221M50
	C31	CEAT222M35
	C22	CEAT332M16
	C85	CEAT470M16
	C21	CEAT472M16
	C11, C12	CEAT472M35
	C5, C81	CFTYA473J50
	C66	CKSQYB473K50
	C83	CKSQYB682K50
	C65	CKSQYF103Z50
	C4	CQHA222J2A

RESISTORS

	R2	RFA1/4PS100J
	Other Resistors	RS1/10S□□□J

OTHERS

	J3	BOARD IN WIRE	ADX7303
	J1	BOARD IN WIRE	ADX7304
	J2	BOARD IN WIRE	ADX7305
	J4	CONNECTOR ASSY 2P	AKP7113
	J13	CONNECTOR ASSY	PF07PG-Q20
	J11	CONNECTOR	PF10EN-S10
	11	PCB BINDER	VEF1040

K PRIMARY UNIT

COILS AND FILTERS

⚠	L1	LINE FILTER	ATF-151

CAPACITORS

⚠	C1, C2 (0.01µF/AC250V)	ACG7010

OTHERS

	H1, H2	FUSE CLIP	AKR7001
⚠	AN1	1P AC INLET	BKP1046

L CONNECTOR UNIT

SEMICONDUCTORS

⚠	IC5221, IC5222 (1A)	AEK7009
	Q5231, Q5523, Q5526	2PB709A
	Q5232, Q5524, Q5525, Q6802	2PD601A
	Q5522	2SB1237X
	Q5521	2SD1858X
	Q3901, Q3902	2SD2114K
	Q3911	DTA124EK
	Q5531	DTA143EK
	D6802–D6805, D6901–D6906	UDZS8.2B

COILS AND FILTERS

	L1651	LADIAL INDUCTOR	LFA100J

Mark	No.	Description	Part No.
CAPACITORS			
	C1651		CEAT101M10
	C5201–C5203, C5207–C5210		CKSQYB102K50
	C6907, C6908		CKSQYB472K50
	C1652, C1653		CKSQYF103Z50
	C1654, C6804, C6901, C6902		CKSQYF104Z25
RESISTORS			
	All Resistors		RS1/10S□□□J
OTHERS			
	5001	19P SOCKET	AKP7001
⚠	CN5022	9P PLUG	AKP7057
	CN5021	17P PLUG	AKP7061
	CN5011, CN5012	23P PLUG	AKP7064
	CN6801	10P MINI DIN SOCKET	AKP7128
	CN3901	KR CONNECTOR	B5B-PH-K-S
	JA1651	OPTICAL LINK OUT	GP1F32T
	CN3091	5P PLUG	KM200IB5
	CN5031	KR CONNECTOR	S7B-PH-K-S
	KN5001	EARTH METAL FITTING	VNF1084

M HP UNIT

CAPACITORS			
	C3901–C3903, C3905		CKSQYF103Z50
	C3904		CKSQYF473Z50
RESISTORS			
	All Resistors		RS1/10S□□□J
OTHERS			
	3901	MINI JACK	AKN7003
	J3901	SMALL CONNECTOR	PF05PG-C30
	3902	PCB BINDER	VEF1040
	KN3901	EARTH METAL FITTING	VNF1084

N AUX UNIT

SEMICONDUCTORS			
	IC3501		NJM4558MD
CAPACITORS			
	C3591, C3592		CCSQCH101J50
	C3593, C3594		CCSQSL471J50
	C5562		CKSQYB102K50
	C3501, C3502, C3595, C5563		CKSQYF103Z50
RESISTORS			
	All Resistors		RS1/10S□□□J
OTHERS			
	CN5551	CONNECTOR POST	B3B-PH-K-S
	CN3592	5P SOCKET	KP200IB5L
	JA3591	2P PIN JACK	VKB1046

O FLSUB UNIT

SEMICONDUCTORS			
	Q5751		2SD1858X
	D5708		MTZJ2.0B
	D5705, D5706		MTZJ8.2B
	D5703, D5704		UDZS8.2B

Mark	No.	Description	Part No.
COILS AND FILTERS			
	L5702	BEAD FILTER	ATX1012
CAPACITORS			
	C5751		CEAL100M16
	C5754–C5756		CKSQYB103K50
	C5752		CKSQYB682K50
	C5753		CKSQYF103Z50
RESISTORS			
	All Resistors		RS1/10S□□□J
OTHERS			
	CN5703	10P MINI DIN SOCKET	AKP7128
	CN5702	13P PLUG	KM200TA13

P DETACH UNIT

SEMICONDUCTORS			
	D5707		UDZ16B
	D5701, D5702, D5709		UDZS8.2B
RESISTORS			
	All Resistors		RS1/10S□□□J
OTHERS			
	CN5902	CONNECTOR	AKP7090
	J5503	JUMPER WIRE	D20PWW0505E

Q CONTROL UNIT

SEMICONDUCTORS			
	IC5902		NJU7002M
	IC5901		PD5539A
	Q5903		2PB709A
	Q5951, Q5952		2PD601A
	Q5902		2SD1781K
	Q5953		DTA124EK
	Q5901		DTC124EK
	D5905, D5908		1SS133
	D5901–D5904, D5907		1SS355
	D5912		MTZJ8.2B
	D5909, D5911		NSPBF50S-8451
	D5906		SIR-563ST3F
	D5913		UDZ16B
	D5910, D5914–D5916		UDZS8.2B
SWITCHES AND RELAYS			
	S5901–S5918		ASG7013
CAPACITORS			
	C5951		CEAL100M16
	C5901		CEAL101M6R3
	C5903		CEAL470M10
	C5902		CKSQYB104K25
	C5953		CKSQYB222K50
	C5954, C5955		CKSQYB472K50
	C5956		CKSQYF103Z50
	C5957		CKSQYF473Z50

Mark	No.	Description	Part No.
RESISTORS			
	R5907		RD1/4PU1R5J
	R5903, R5911		RD1/4PU221J
	R5909		RD1/4PU270J
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN5901	KR CONNECTOR	AKP7091
	X5901	CERAMIC (3.84MHz)	ASS7029

R TERMINAL UNIT

OTHERS

	KN5901	BATTERY PLATE 1	ABK7017
	KN5902	BATTERY PLATE 2	ABK7018
	J5902	JUMPER WIRE 3P	D20PWW0305E

S SWITCH UNIT

SWITCHES AND RELAYS

	S5951	ASH7003

RESISTORS

	All Resistors	RS1/10S□□□J

OTHERS

	BZ5901	BUZZER	APV7003
	J5904	JUMPER WIRE 3P	D20PWW0305E

T FL UNIT

SEMICONDUCTORS

	IC5701	LC75712E
	Q5707	2SC2412K
	Q5704	DTA124EK
	Q5701–Q5703, Q5705	DTC124EK
	D5711	1SS133
	D5713	MTZJ8.2B
	D5712	UDZ36B

COILS AND FILTERS

	L5711	LAU100J
	L5701	LAU220J

CAPACITORS

	C5701	CCSQCH300J50
	C5721, C5722	CEAL1R0M50
	C5707	CEJA100M16
	C5702, C5703	CEJA101M6R3
	C5708	CEJA470M16
	C5709, C5741	CKSQYB103K50
	C5712, C5725, C5726	CKSQYB473K50
	C5706	CKSQYF103Z50
	C5704	CKSQYF224Z25
	C5710, C5711	CKSQYF473Z50

RESISTORS

	R5724	RA12T473J
	R5722, R5723	RA13T473J
	R5721	RA15T473J
	R5704	RD1/4PU472J
	Other Resistors	RS1/10S□□□J

Mark	No.	Description	Part No.
OTHERS			
	V5701	FL TUBE	AAV7069
	5701	REMOTE RECEIVER UNIT	GP1U27X
	CN5701	13P SOCKET	KP200TA13L
		FL HOLDER	VNF1096

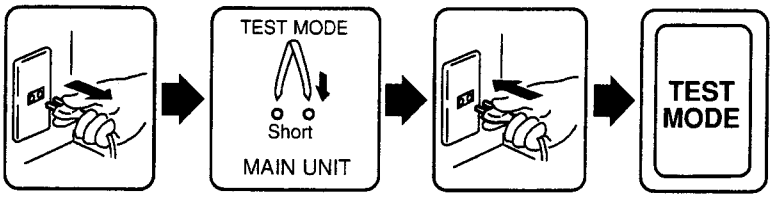
6. ADJUSTMENT

NOTE: There is no information to be shown in this CD adjustment.

6.1 TEST MODE

6.1.1 How to Start/Cancel Test Mode

TEST MODE : ON



An initial function becomes CD. And becomes a blank display [:].

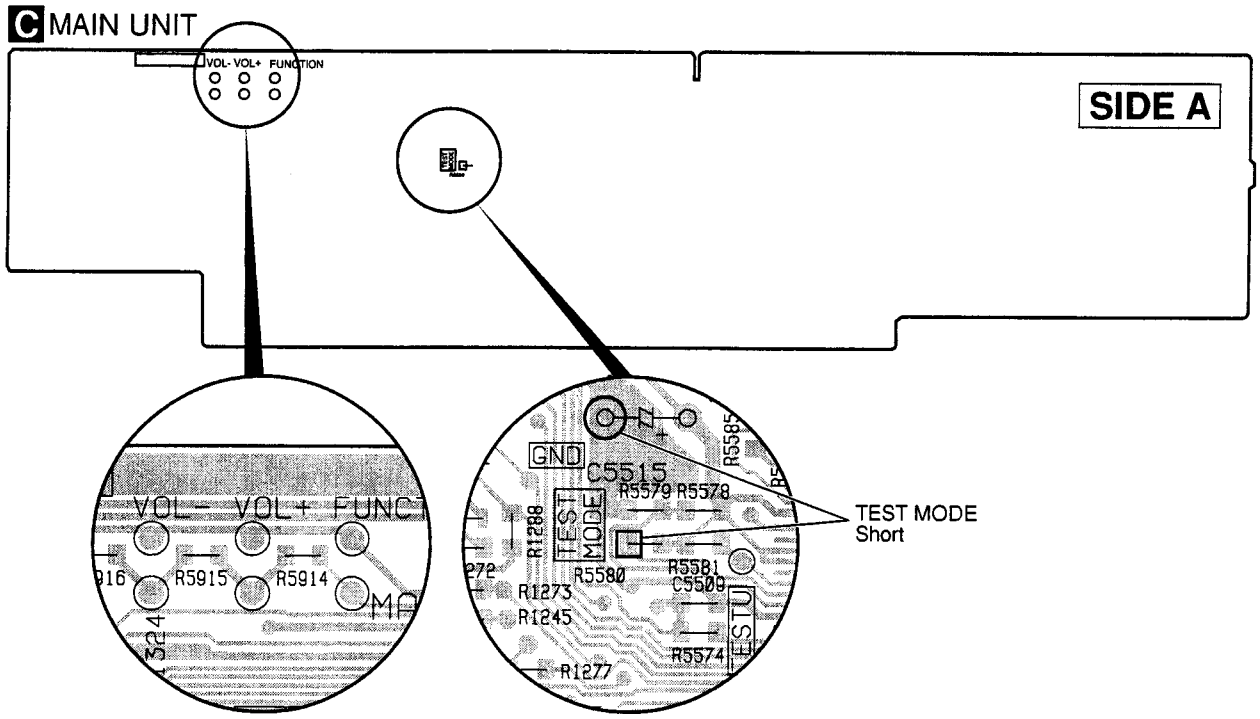
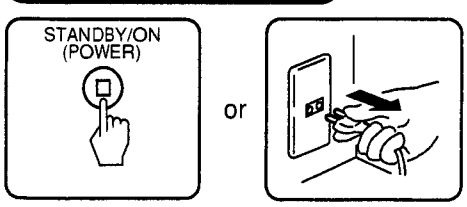


Fig. 1 Test Mode Point Location

TEST MODE : STOP

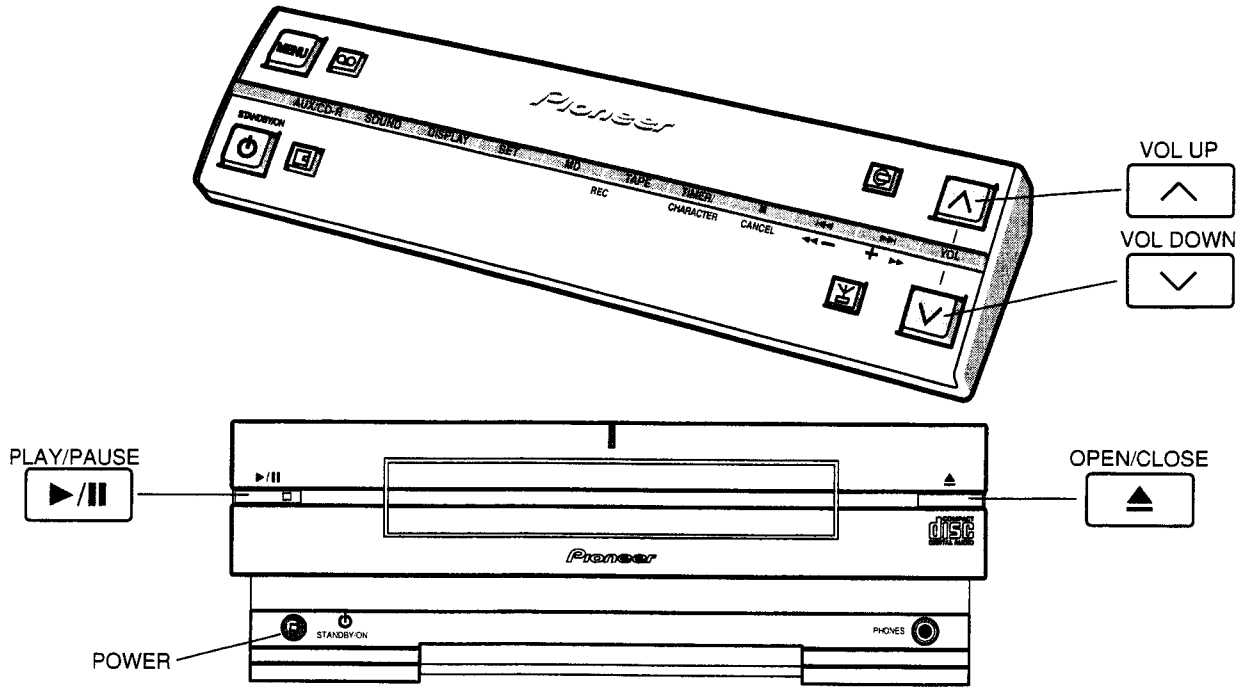


6.1.2 FUNCTION AND OPERATION IN TEST MODE

Main body key (The land short circuit of MAIN UNIT contains.) or, by remote control unit.

Main body key	Supplied commander key	Single goods CD remote control unit	Operation condition	Content of operation	FL display
FUNCTION (*4)	(None)	(None)	Always	The function is changed.	
OPEN/CLOSE	(None)	OPEN/CLOSE (A251)	When Servo ON	All servos are turned off.	:
			When CD STOP	The CD tray opens and close.	
POWER (*1)	SOUND	RANDOM (A24A)	When CD STOP	LD is turned on, and auto focus is done.	FOCUS ON
PLAY/PAUSE	PLAY/PAUSE	PLAY/PAUSE (A2E2) PLAY (A217)	After FOK	The spindle is kicked. And, the self adjustment processing tracking servo is turned on and MUTE is released. (*2)	SPNDL KICK ↓ SERVO ON
PLAY/PAUSE	PLAY/PAUSE	PLAY (A217)	When TRK SERVO OFF	The tracking servo is turned on, and MUTE is released.	SERVO ON
PLAY/PAUSE	PLAY/PAUSE	PAUSE (A218)	When TRK SERVO ON	The tracking servo is turned off, and MUTE is put.	SERVO OFF
VOL UP (*4)	∧ key	TRK + (A210) MANU+ (A2E0)	When TRK SERVO ON	The tracking servo is turned off, MUTE is put, and the slider is moved in the direction of FWD.	XX : XX ↓ SERVO OFF
VOL DOWN (*4)	∨ key	TRK - (A211) MANU - (A2E1)	When TRK SERVO ON	The tracking servo is turned off, MUTE is put, and the slider is moved in the direction of RVS.	XX : XX ↓ SERVO OFF
(None) (*3)	(None) (*3)	PGM (A20D)	When CD has Stopped	LDON•••Auto focus•••Spindle kick•••Self adjustment•••TOC lead•••The 2th search••• Tracking servo ON••• MUTE release	FOCUS ON ↓ SPNDL KICK ↓ SERVO ON

*1 It is FUNCTION key for power-off when there is no commander Please push main body STANDBY/ON (POWER) key after changing the function besides CD pushing (Or, Test point rand on MAIN UNIT is short).
*2 If the slider is not sent to outer a little to turn on the servo by surroundings the in DISC, the sound is not occasionally emitted.
*3 It is possible to operate only by remote control for the unit check mode.
*4 The land of these keys on MAIN UNIT is short (Refer to Figure 1).



6.2 TUNER SECTION

■ FM Tuner Section

• Set the mode selector to FM BAND.
• Connect the wiring as shown in Fig. 1.

Step No.	Adjustment Title	FM SG (1kHz, ± 75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Front End Sensitivity	106	0-30	106MHz	L6104 L6105 L6102 T6101	Adjust so that the DC voltage between the IC6201-pin 20 and GND becomes at maximum level.
2	Stereo Distortion	98 (ON STEREO)	80	98MHz	T6101	Minimize the distortion with 1/8 rotation of the core.
3	TUNED IND. Lighting Level	98	18 ± 2	98MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

Note:
Before adjusting, make sure there is no gap between L6101 and L6102 as well as between L6103 and L6104. If there is a gap between them, bring them into contact with each other first, and then make adjustments.

■ AM Tuner Section

• Set the mode selector to AM BAND.
• Connect the wiring as shown in Fig. 1.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	Front End Sensitivity	999 *1	35-45	999kHz *1	T6201	Adjust so that the DC voltage between the IC6201-pin 20 and GND becomes at maximum level.

*1: For the area using 10kHz step, frequencies should be 1000kHz.

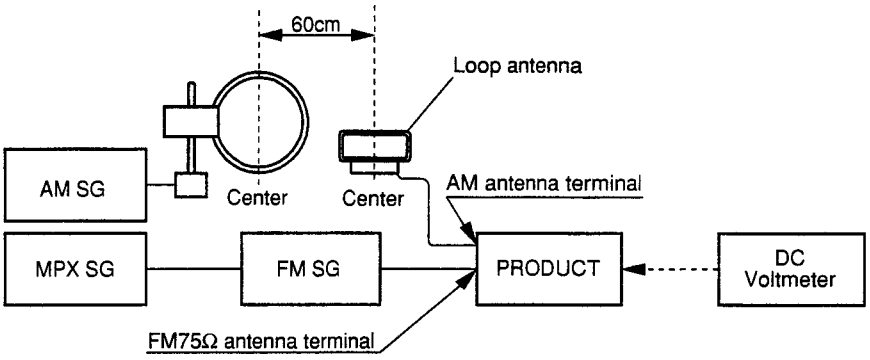


Fig. 1 AM and FM Adjustment Wiring Diagram

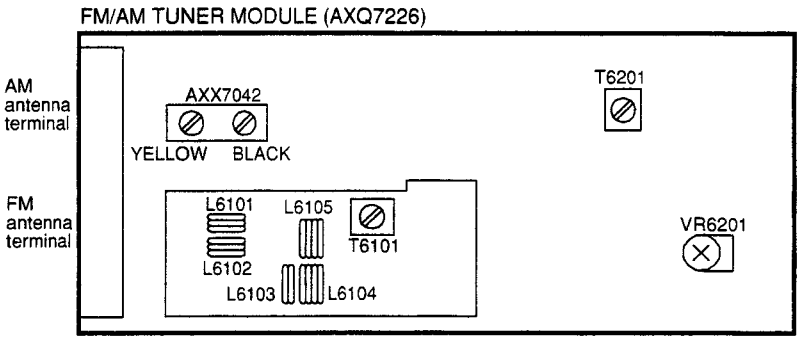
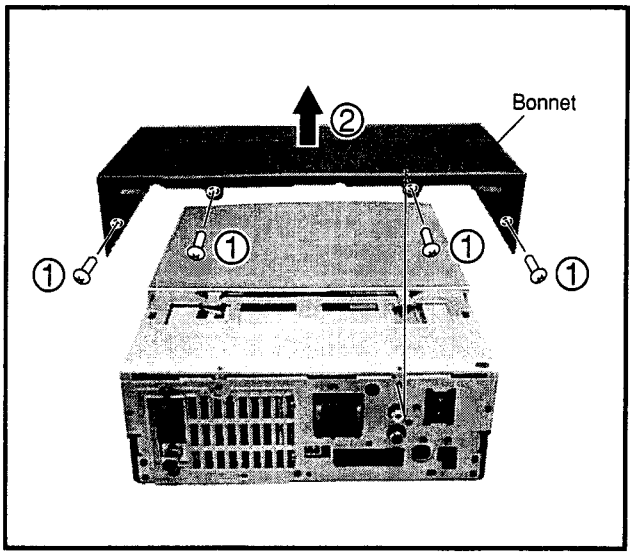


Fig. 2 Adjustment Point

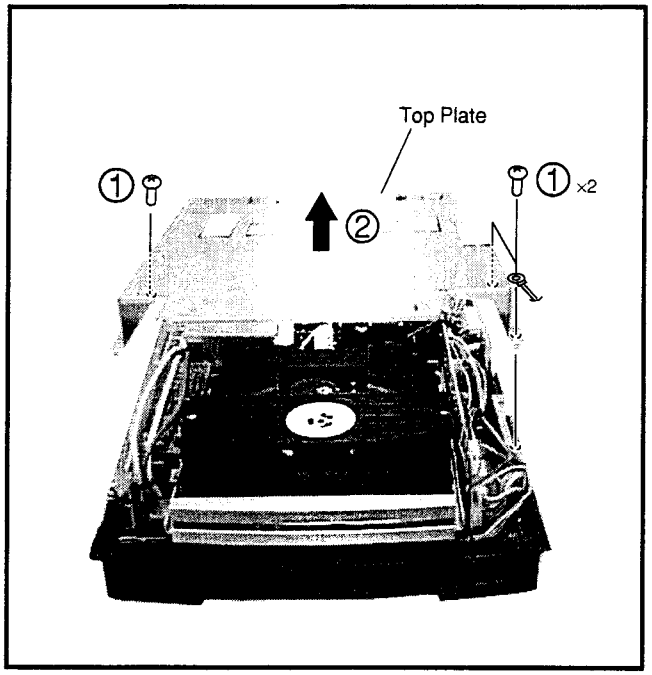
7. GENERAL INFORMATION

7.1 DISASSEMBLY

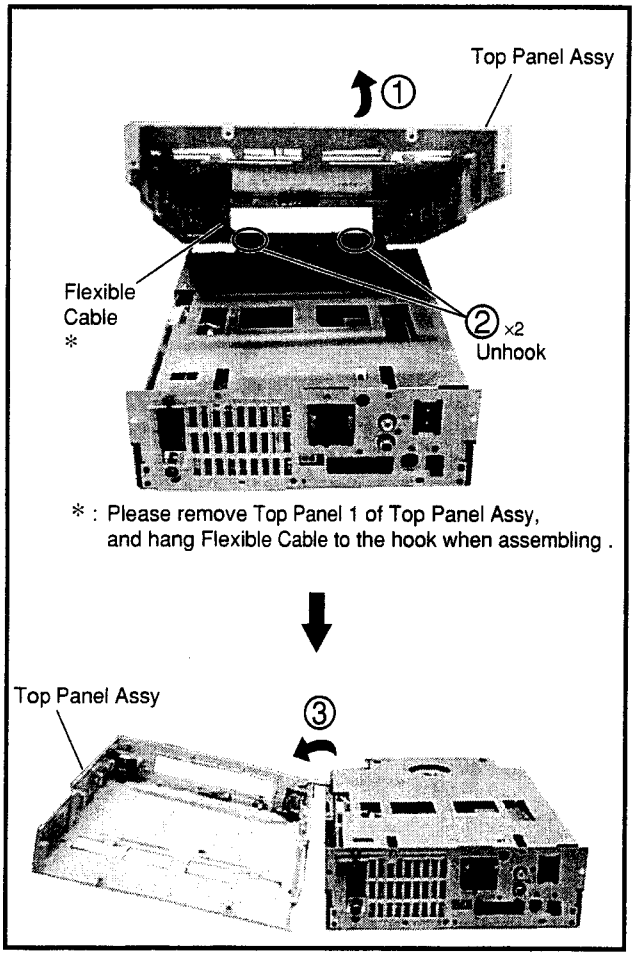
■ Bonnet



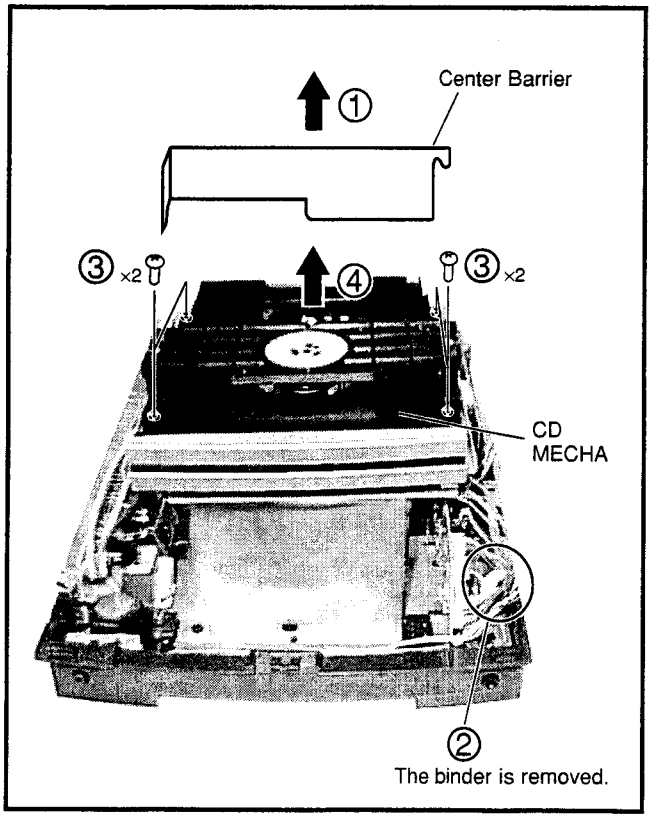
■ Top Plate



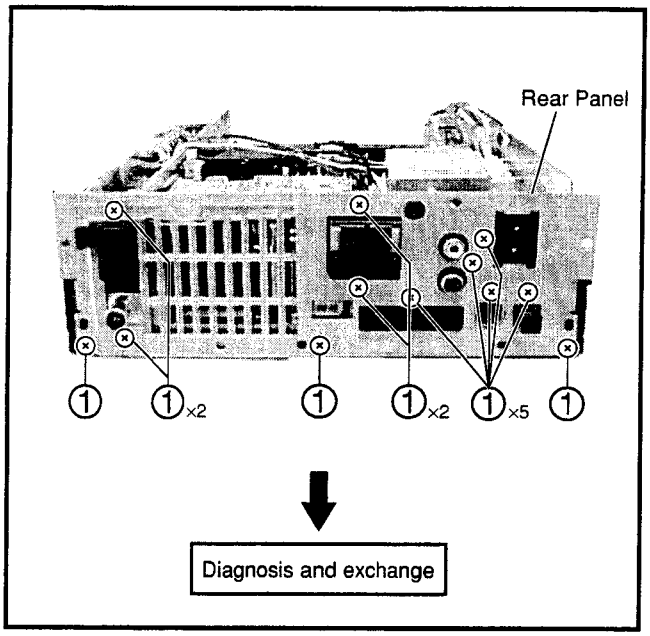
■ Top Panel Assy



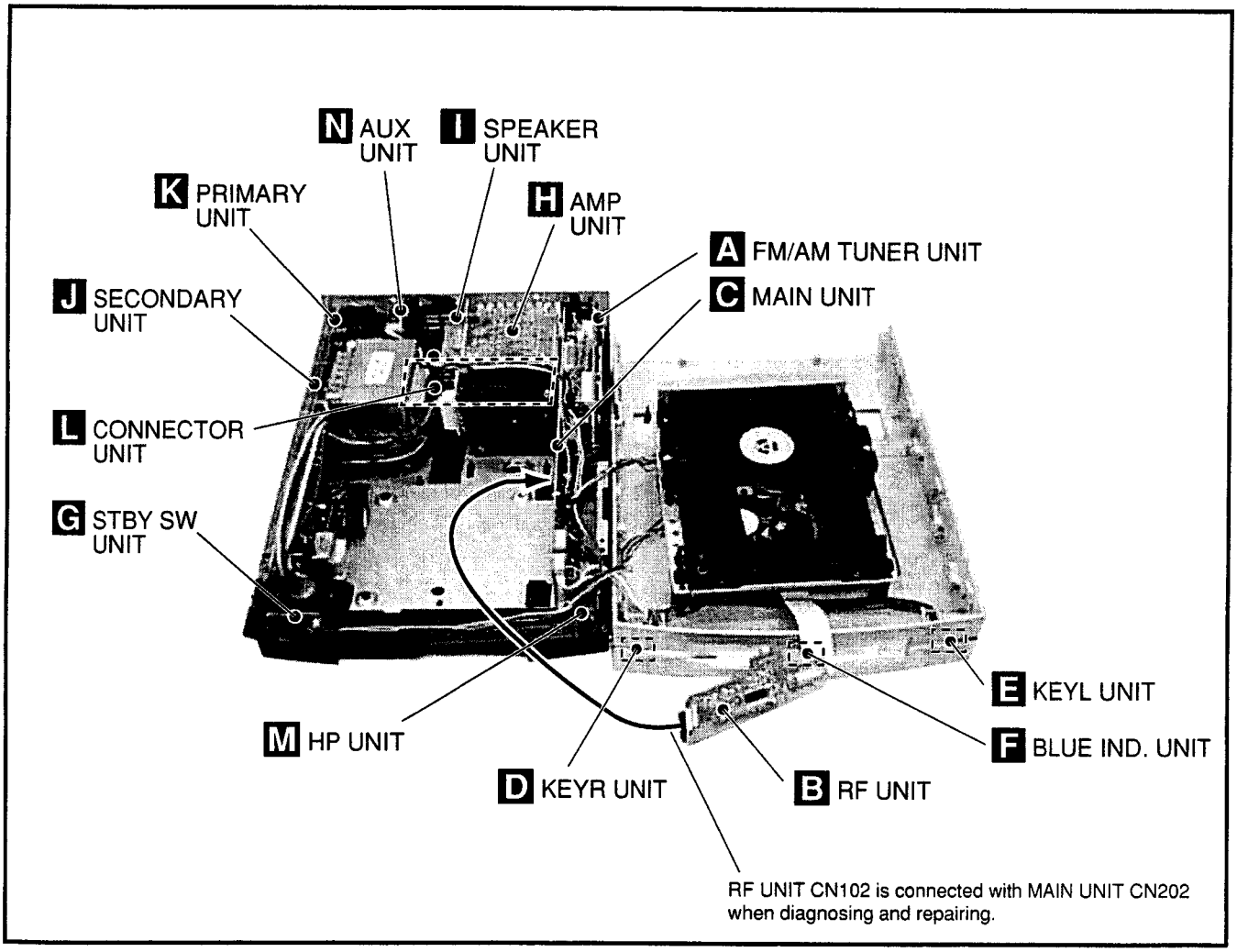
■ CD MECHA



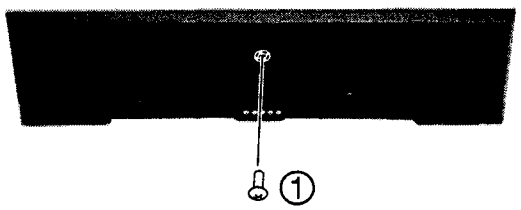
■ Rear Panel



■ PCB Location



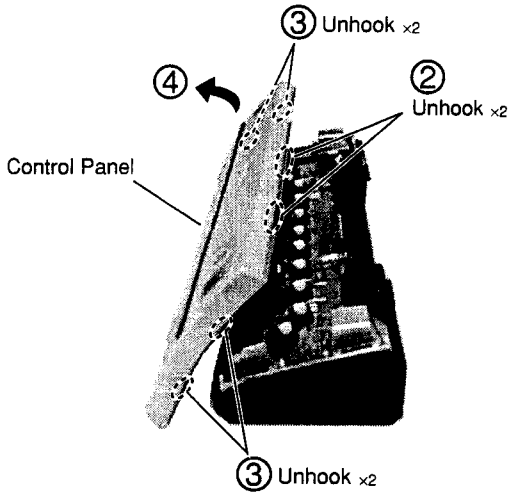
■ Remote Control Unit

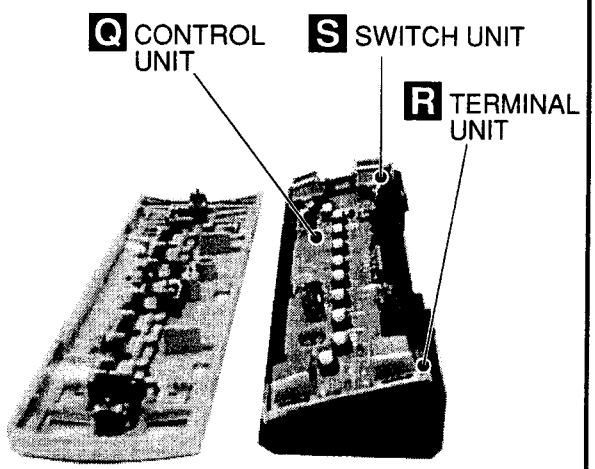


② The hook two places of the rear side are removed.

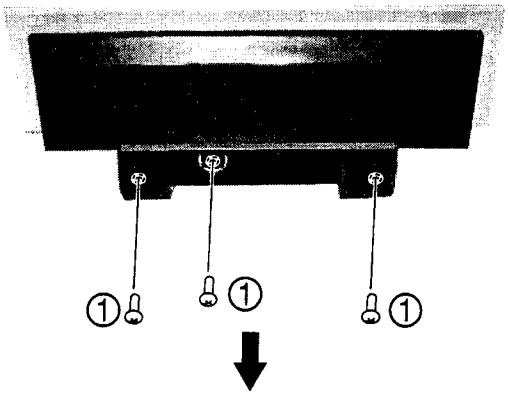
③ Draws to either of Control Panel right and left, and remove one side of hook right and left.

④ The rear side is lifted, and Control Panel is removed forward.





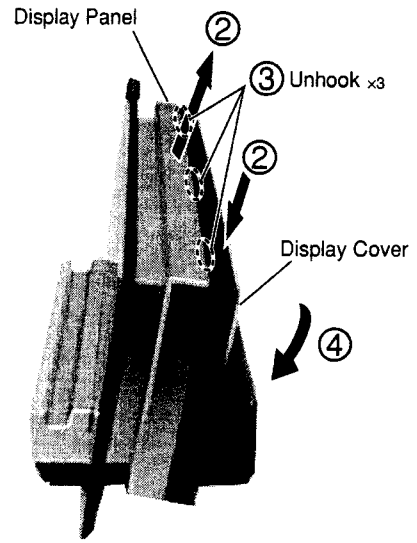
■ Display Unit

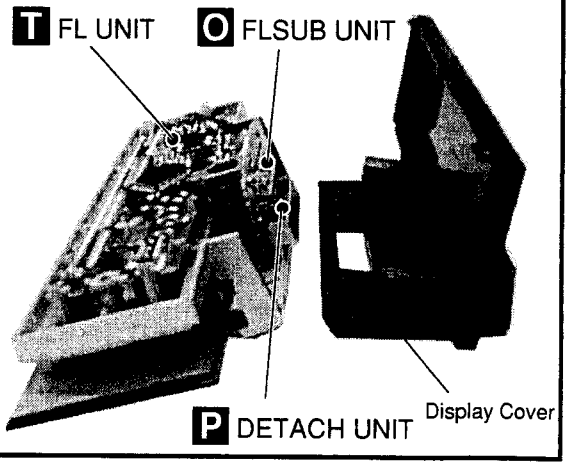


② Display Panel and Display Cover are vertically moved.

③ The hook three places of the upper part are removed.

④ Removes while rotating Display Cover in the direction of the arrow.





7.2 PARTS

7.2.1 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PDG248A (MAIN UNIT : IC5501)

• System Control IC

• Pin Function

No.	Mark	Pin Name	I/O	Function
1	PB5/PPO13	CDSHUT	O	CD Decoder (CXD2587Q) Clock control (H: OFF, L : ON)
2	PB4/PPO12	SCL	O	E-VOL (M62420FP) control CLK
3	PB3/PPO11	WF1	O	WOOFER LEVEL
4	PB2/PPO10	WF2	O	WOOFER LEVEL
5	PB1/PPO9	SCLK	O	System bus CLK
6	PB0/PPO8	NC	O	(OPEN)
7	PC7/RTO7	SDATAI	I	System bus DATA input L output at standby
8	PC6/RTO6	SREQ	I/O	System bus REQ L output at standby
9	PC5/RTO5	TUNE	I	TUNE signal input
10	PC4/RTO4	STEREO	I	STEREO signal input
11	PC3/RTO3	TXDO	I	TX DATA input
12	PC2/PPO18	TXMUTE	O	TX MUTE control
13	PC1/PPO17	PLLE	O	TX CE
14	PC0/PPO16	TXDI	O	TX DATA
15	PJ7	PLLK	O	TX CLK
16	PJ6	RDSDATA	I	Decoder Data input from RDS DATA (BU1923F)
17	PJ5	FANDET	I	FAN rotation detection (stop : H)
18	PJ4	RDSFM	O	RDS decoder (BU1923F) clock control (H : stop)
19	PJ3	SDA	O	E-VOL (M62420FP) control DATA
20	PJ2	HPSW	I	H.P SW input (L : with H.P)
21	PJ1	SDATAO	O	System bus DATA output
22	PJ0	NC	O	(OPEN)
23	PD7	FLDATA	O	FL driver (LC75712/10) control DATA
24	PD6	FLCLK	O	FL driver (LC75712/10) control CLK
25	PD5	FLCE	O	FL driver (LC75712/10) control LATCH
26	PD4	CDTOCDR	O	Communication with CD-R : Send DATA from CD to CD-R
27	PD3	MDPOW	O	MD Power control
28	PD2	SPCONT	O	SP RELAY control
29	PD1	HPPOW	O	H.P AMP Power (L: after 1 second from Power-ON)
30	PD0	XMUTE	O	LINE MUTE
31	PH7	XLEDCD	O	CD PLAY LED control
32	PH6	XLEDPOW	O	STAND-BY LED control
33	PH5	NC	O	(OPEN)
34	PH4	XPOWON	O	AC RELAY control active L
35	PH3	NC	O	(OPEN)
36	PH2	NC	O	(OPEN)
37	PH1	F1B	O	BU4052BCF control B *1
38	PH0	F1A	O	BU4052BCF control A *1
39	MP	MP	I	Connect GNDD
40	RST	XRESET	I	Microcomputer RESET input
41	VSS	VSS	-	Connect GNDD
42	XTAL	XTAL	O	Ceramic resonator
43	EXTAL	EXTAL	I	Ceramic resonator
44	CS0	E+5	I	+5V
45	SI0	DDATA	I	Display DATA input
46	SO0	NC	O	(OPEN)
47	SCK0	DCLK	I	Display DATA clock
48	PF7/AN11	DREQ	O	Display DATA request

No.	Mark	Pin Name	I/O	Function
49	PF6/AN10	NC	O	(OPEN)
50	PF5/AN9	CDRTOCD	I	Not used (Communication with CD-R : Send DATA from CD to CD-R)
51	PF4/AN8	NC	O	(OPEN)
52	AVSS	GNDD	-	Connect GNDD
53	AVREF	AVREF	I	Connect AVDD
54	AVDD	AVDD	-	Power supply
55	PF3/AN7	GNDD	-	Connect GNDD
56	PF2/AN6	UTEST	I	Test mode port for unit checker : port input mode (normaly H)
57	PF1/AN5	TEST	I	Test mode : port input mode (normaly H)
58	PF0/AN4	DESTIN	I	Destination switch : Anarog input
59	AN3	GNDD	-	Connect
60	AN2	NC	I	(OPEN)
61	AN1	NC	I	(OPEN)
62	AN0	KEY1	I	Anarog input : main unit key input
63	PG7/EXI1	CD INSIDE	I	CD INSIDE SW input
64	PG6/EXI0	CD OPEN	I	CD TRAY OPEN SW input
65	PG5	CD CLOSE	I	CD TRAY CLOSE SW input
66	PG4	CDFOK	I	CD FOCUS OK signal input
67	PG3	CDGFS	I	CD GFS signal input
68	PG2	CDSENS	I	CD SENS signal input
69	PG1	CDR0	I	CD sound R ch zero detection signal input
70	PG0	CDL0	I	CD sound L ch zero detection signal input
71	PE7/DAB1	NC	O	Pull-up +5V
72	PE6/DAB0	NC	O	Pull-up +5V
73	PE5/DAA1	CDSCLK	O	CLK for reading SENS serial data
74	PE4/DAA0	CDXLAT	O	CD decoder (CXD2587Q) control LATCH
75	PE3/PWM1	NC	O	(OPEN)
76	PE2/PWM0	NC	O	(OPEN)
77	PE1/EC/INT2	RDSCLK	I	Clock input for reading decode data from RDS decoder (BU1923F)
78	PE0/INT0	ACPULSE	I	AC power supply pulse input
79	PI7/SI1	CDSQSO	I	SUBQ, level input
80	PI6/SO1	NC	O	(OPEN)
81	PI5/SCK1	CDSQCK	O	CLK for reading SQSO
82	PI4/INT1/NMI	CDSCOR	I	Sub code sync. signal input
83	PI3/TO/ADJ	CDLDON	O	CD laser diode ON/OFF
84	PI2/PWM	NC	O	(OPEN)
85	PI1/RMC	REM	I	Remote control signal input
86	TEX	GNDD	I	
87	TX	NC	O	(OPEN)
88	VSS	GNDD	-	Ground
89	VDD	VDD	-	Power supply
90	NC	NC	-	Connect VDD
91	PA7/PPO7	NC	O	(OPEN)
92	PA6/PPO6	CDCLK	O	CD decoder (CXD2587Q) control CLK
93	PA5/PPO5	CDDATA	O	CD decoder (CXD2587Q) control DATA
94	PA4/PPO4	CDSYSM	O	CD decoder (CXD2587Q) MUTE control
95	PA3/PPO3	CDXRST	O	CD decoder (CXD2587Q) RESET
96	PA2/PPO2	LOADIN	O	CD TRAY LOAD IN
97	PA1/PPO1	LOADOUT	O	CD TRAY LOAD OUT
98	PA0/PPO0	CDMUTER	O	CD MUTE R ch
99	PB7/PPO15	CDMUTEL	O	CD MUTE L ch
100	PB6/PPO14	TCPOW	O	TC Power supply control

- Port C can bitting select I/O. The input after resets.
- Port D can select I/O only by (PD0-3, PD4-7) every four bits. The input after resets.
- PF4-7 of port F can bitting select I/O. The input after resets.
- Port I can bitting select I/O. The input after resets.
- Port J can bitting select I/O. The input after resets.
- PE6 Attention concerning PE7. Adjust to 0.7V or more both PE6 and PE7 when RST standing up from L to H. Please note entering in the test mode of the microcomputer. Pull-up is necessary.
- When resetting : Makes to Hi-Z excluding PE6 and PE7. PE6 and PE7 are made H level.
- Connect the 90th terminals NC with Vdd.
- Connect both of the terminal Vss of the 41th pin and the 88th pin with GND.
- It is terminal OPEN and OK for the model without RDS.
  RDSDATA is set to make to the output mode and to output LOW with the microcomputer.
- The processing such as pull-down is necessary for RDSCLK for the model without RDS.

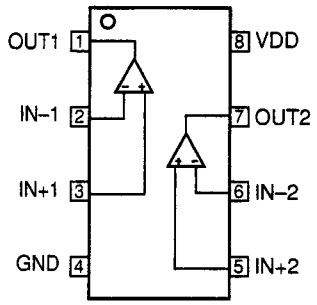
***1 : Change of function. The truth value table of BU4052BCF.**

A	B	Switch turned on	Function
L	L	X0, Y0	CD
H	L	X1, Y1	AUX
L	H	X2, Y2	TC - MD
H	H	X3, Y3	TX

■ NJU7002M (CONTROL UNIT : IC5902)

• OP-AMP IC

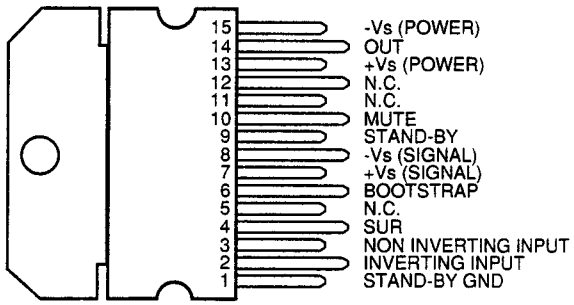
• Pin Function



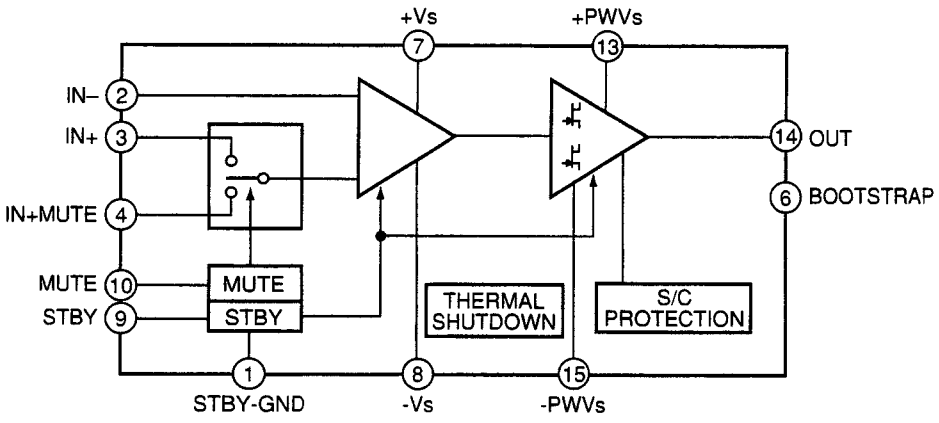
■ TDA7294V (AMP UNIT : IC3303)

• DMOS Audio Amplifier IC

• Pin Assignment



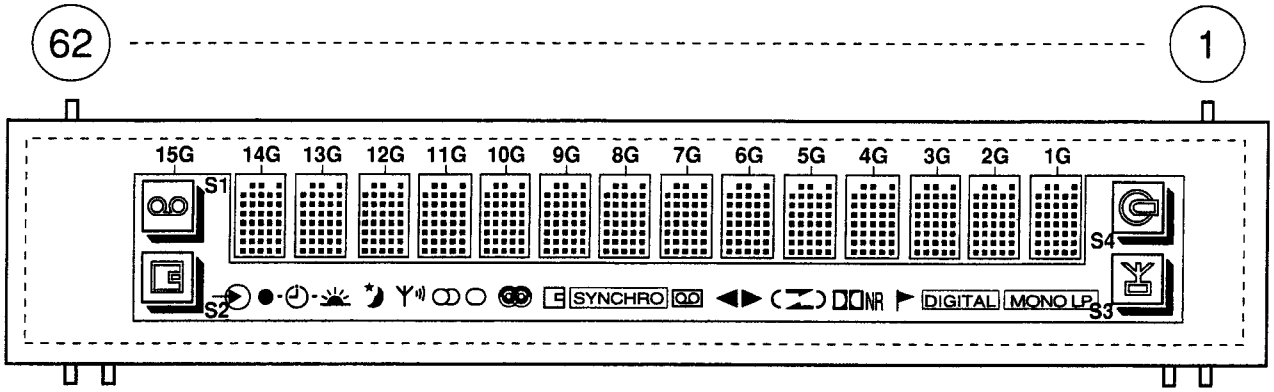
• Block Diagram



7.2.2 DISPLAY

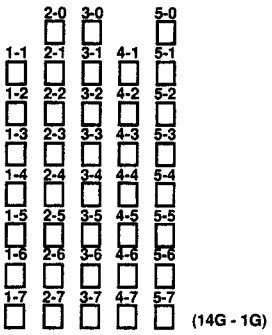
■ AAV7069 (FL UNIT : V5701)

• FL DISPLAY



● **Anode Connection**

	15G	14G - 1G
P1		1-1
P2	S1	2-1
P3		3-1
P4	S2	4-1
P5		5-1
P6		1-2
P7		2-2
P8		3-2
P9		4-2
P10		5-2
P11		1-3
P12		2-3
P13		3-3
P14		4-3
P15	SYNCHRO	5-3
P16		1-4
P17		2-4
P18		3-4
P19		4-4
P20		5-4
P21		1-5
P22	NR	2-5
P23		3-5
P24	DIGITAL	4-5
P25	MONO LP	5-5
P26		1-6
P27	S3	2-6
P28		3-6
P29	S4	4-6
P30	–	5-6
P31	–	1-7
P32	–	2-7
P33	–	3-7
P34	–	4-7
P35	–	5-7
P36	–	2-0
P37	–	3-0
P38	–	5-0



● **Pin Connection**

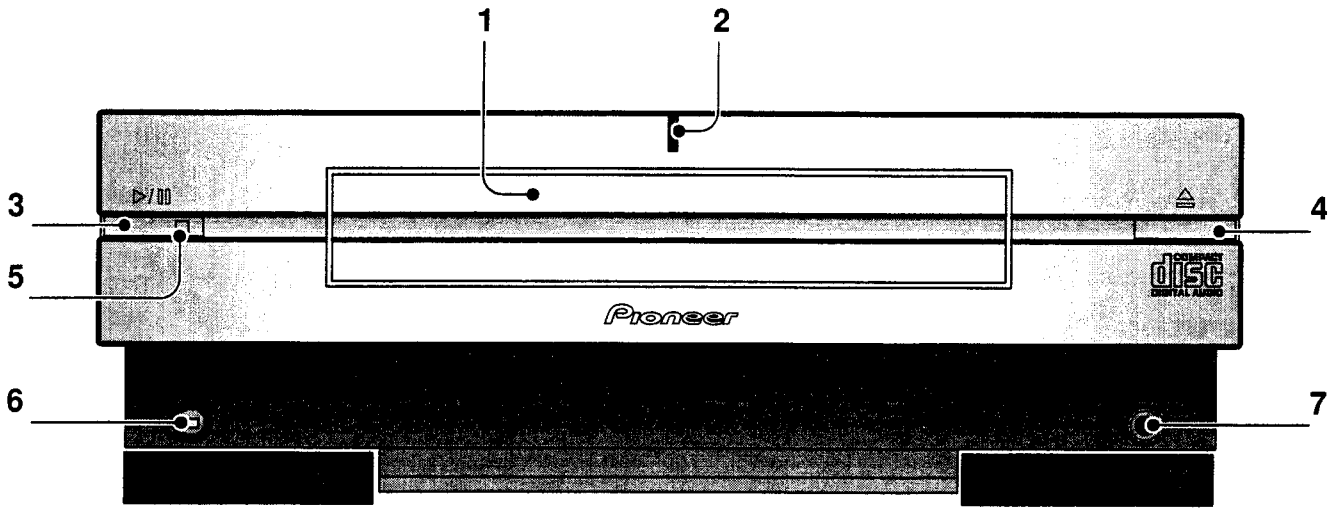
Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Connection	F1	F1	NP	NP	P38	P37	P36	P35	P34	P33	P32	P31	P30	P29	P28	P27	P26	P25	P24	P23	P22	P21	P20	P19	P18	P17	P16	P15	P14	P13	P12
Pin No.	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
Connection	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	NC	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G	14G	15G	NP	NP	F2	F2

F1, F2 : Filament 1G~15G : Grid NP : No Pin NC : No Connection DL : Datum Line

8. PANEL FACILITIES AND SPECIFICATIONS

8.1 PANEL FACILITIES

Front Panel



CD Receiver

1 **CD tray**

2 **Power light** – Lights when the unit is switched on.

3 ▷/II **button** – Press to play a disc, or pause a disc that's already playing (press again to restart playback).

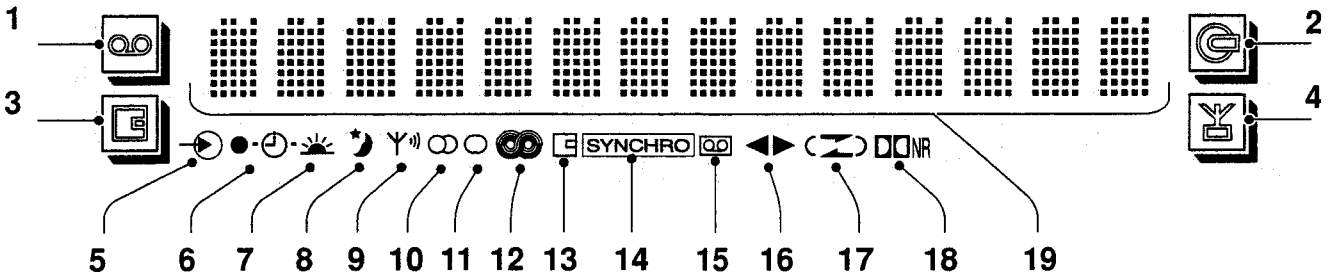
4 ⏏ **button** – Press to open or close the CD tray.

5 **Play light** – Lights when a CD is playing

6 **Standby/On button** – Press to switch the unit between standby and on modes. Indicator lights in standby mode. **Note:** this unit consumes a small amount of electricity in standby mode (0.9W).

7 **Phones socket** – Connect a pair of headphones for private listening. When plugged in, the speakers are automatically switched off.

Display



1 **Tape function** – Highlights when in tape deck mode

2 **CD function** – Highlights when in CD player mode

3 **MD function** – Highlights when in MD recorder mode

4 **Tuner function** – Highlights when in tuner mode

5 **Aux/CD-R function** – Lights when in aux/CD-R mode

6 **Record timer** – Lights when setting the timer; flashes once set.

7 **Wake up timer** – Lights when the wake up timer is set; flashes during wake up timer playback.

8 **Sleep timer** – Lights when the sleep timer is set.

9 **Tuned** – Lights when the tuner is tuned to a broadcast.

10 **Stereo** – Lights when the tuner is receiving an FM stereo broadcast.

11 **Mono** – Lights when the tuner is set to the mono mode (applies only to FM broadcasts).

12 **RDS** – Lights when the tuner is in an RDS mode.

13 **MD recording** – Lights when MD is in record or record-pause mode.

14 **SYNCHRO** – Lights during automatic (synchro) recording.

15 **Tape recording** – Lights when tape deck is in record or record-pause mode.

16 **Play direction** – Indicates the current direction (side) of the tape.

17 **Reverse mode** – Indicates the current tape reverse mode.

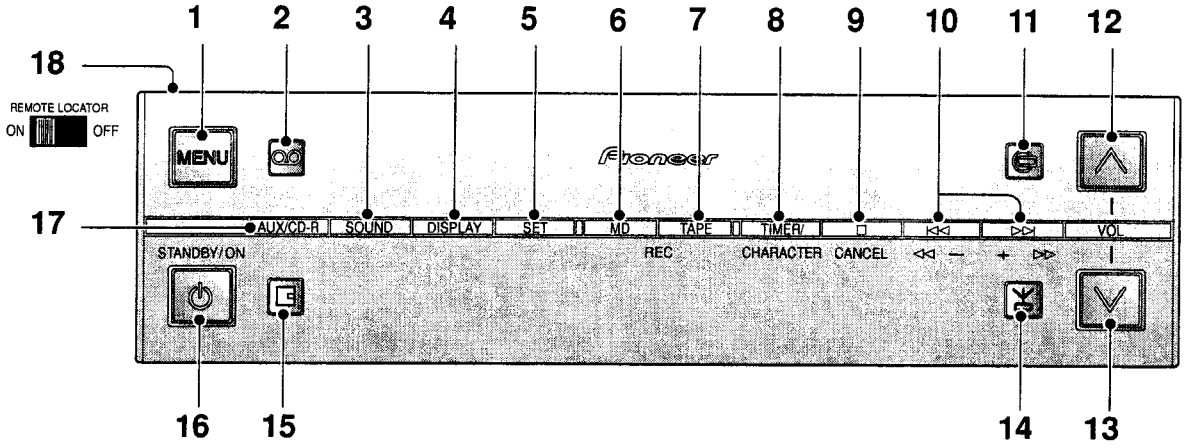
18 **Dolby NR*** – Lights when Dolby NR is switched on.

19 **Character display**

*

- **Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.**
- **"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.**

Remote Control



1 **MENU** – Press to access various features, including station memory naming, changing the tape reverse mode, and so on.

2 **Tape deck mode** – Press to switch the sound to tape deck and start the tape playing (if there's one loaded).

3 **SOUND** – Press to put the ⏮ and ⏭ buttons into tone, subwoofer level and balance control mode.

4 **DISPLAY** – Press to change the kind of information that the display shows. The choices available depend on the current function (CD, tape, etc.).

5 **SET** – Press to finish operations such as setting the clock, setting the reverse mode, and so on.

6 **MD REC** – Press to put MD recorder into record-pause mode.

7 **TAPE REC** – Press to put tape deck into record-pause mode.

8 **TIMER/CHARACTER** – Press to start setting the timer. Also use to select characters when naming tuner station memories, etc.

9 □ **CANCEL** – Press to stop playback (or recording) of the CD/MD/tape. Also use to cancel operations, such as setting the clock, before the **SET** button has been pressed.

10 ⏮ ⏭ **buttons** – Press to fast-reverse / fast-forward the CD/MD/tape.

11 **CD mode** – Press to switch the sound to CD and start the disc playing (if there's one loaded).

12 **Up** – Use to raise the volume.

13 **Down** – Use to lower the volume.

14 **Tuner mode** – Press to switch the sound to tuner, switch between AM and FM, and switch between preset station memories.

15 **MD mode** – Press to switch the sound to MD and start the disc playing (if there's one loaded).

16 **STANDBY/ON** – Press to switch the unit between standby and on modes.
Note: this unit consumes about 1W of electricity in standby mode.

17 **AUX/CD-R mode** – Press to switch the sound to the component connected to the AUX/CD-R inputs.

18 **REMOTE LOCATOR** – Use to switch on/off remote locator.

8.2 SPECIFICATIONS

Stereo CD Receiver: XC-L77

Amplifier Section

Continuous Power Satellite (RMS) ..... 30 W + 30 W
(1 kHz, THD 10%, 8 Ω)
Continuous Power Subwoofer (RMS) ..... 50 W
(100 Hz, THD 10%, 4 Ω)
Continuous Power Satellite (DIN) ..... 22 W + 22 W
(1 kHz, THD 1%, 8 Ω)
Continuous Power Subwoofer (DIN) ..... 40 W
(100 Hz, THD 1%, 4 Ω)
Music Power Satellite (DIN) ..... 40 W + 40 W
(1 kHz, THD 1%, 8 Ω)
Music Power Subwoofer (DIN) ..... 70 W
(100 Hz, THD 1%, 4 Ω)

• Above specifications are for when the power supply is 230 V.

FM Tuner Section

Frequency Range ..... 87.5 - 108MHz
Antenna ..... 75 Ω, unbalanced

AM Tuner Section

Frequency Range ... 531 kHz - 1,602 kHz(9 kHz step);
..... 530 kHz - 1,700 kHz (10 kHz step)
Antenna ..... Loop antenna

Compact Disc Player Section

Type ..... Compact disc digital audio system
Usable discs ..... Compact discs
Channels ..... 2 (stereo)
Frequency Response ..... 4 Hz–20 kHz
Signal-to-Noise Ratio ..... 110 dB (EIAJ)
Wow and Flutter ..... Limit of measurement
(0.001%) or less (EIAJ)
Power Requirements
..... MYXK Type : AC 220- 230 V, 50/60 Hz
..... NVXK Type : AC 230 V, 50/60 Hz
Power Consumption (ON mode) ..... 98 W
Power Consumption (Standby mode) ..... 0.9 W
Dimensions ..... 220 (W) x 75 (H) x 318 (D) mm
Weight ..... 4.0 kg

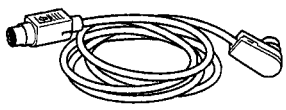
Accessories

Operating instructions 1
Warranty card 1
FM wire antenna 1
AM loop antenna 1
Lithium battery (CR2025) 1
AC power cord 1
Display unit connecting cord 1

NOTE: Specifications and design subject to possible modification without notice, due to improvements.

• **ACCESSORIES**

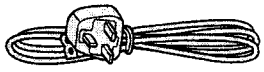
•Display unit connecting cord
(ADE7014)



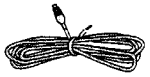
• Lithium battery
[VEM1009 (CR2025)]

• AC power cord
(ADG7010)
(For MYXK type)

• AC power cord
(ADG7009)
(For NVXK type)



• FM wire antenna
(ADH7005)



• AM loop antenna
(ATB7007)
(shown assembled)